

Instruction for JEMA-MIB2

No.	Index	NAME	SYNTAX	MAX-ACCESS	Unit	Description
001	1	jema2UpsObjects	—	—	—	—
002	1.1	jema2UpsIdent	—	—	—	—
003	1.1.1.0	jema2UpsIdentManufacturer	DisplayString(SIZE(0..31))	read-only	—	The name of the UPS manufacturer.
004	1.1.2.0	jema2UpsIdentModel	DisplayString(SIZE(0..63))	read-only	—	The UPS Model designation.
005	1.1.3.0	jema2UpsIdentUPSSoftwareVersion	DisplayString(SIZE(0..63))	read-only	—	The UPS firmware/software version(s). This variable may or may not have the same value as jema2UpsIdentAgentSoftwareVersion in some implementations.
006	1.1.4.0	jema2UpsIdentAgentSoftwareVersion	DisplayString(SIZE(0..63))	read-only	—	The UPS firmware/software version(s). This variable may or may not have the same value as jema2UpsIdentAgentSoftwareVersion in some implementations.
007	1.1.5.0	jema2UpsIdentName	DisplayString(SIZE(0..63))	read-write	—	A string identifying the UPS. This object should be set by the administrator. e.g. UPS1,UPS2
008	1.1.6.0	jema2UpsIdentAttachedDevices	DisplayString(SIZE(0..63))	read-write	—	A string identifying the devices attached to the output(s) of the UPS. This object should be set by the administrator. e.g. 1 computer1, hub1 e.g. 2 191.168.1.2
009	1.1.7.0	jema2UpsIdentManufacturedDate	DisplayString(SIZE(0..10))	read-only	yyyy-mm-dd	The date when the UPS was manufactured in yyyy-mm-dd format.
010	1.1.8.0	jema2UpsIdentManufacturedNumber	DisplayString(SIZE(0..63))	read-only	—	The manufacture number of the UPS.
011	1.2	jema2UpsBattery	—	—	—	—
012	1.2.1.0	jema2UpsBatteryStatus	INTEGER { unknown(1), batteryNormal(2), batteryLow(3), batteryDepleted(4) }	read-only	—	The indication of the capacity remaining in the UPS system's batteries. A value of batteryNormal indicates that the remaining run-time is greater than jema2UpsConfigLowBattTime. A value of batteryLow indicates that the remaining battery run-time is less than or equal to jema2UpsConfigLowBattTime. A value of batteryDepleted indicates that the UPS will be unable to sustain the present load when and if the utility power is lost (including the possibility that the utility power is currently absent and the UPS is unable to sustain the output).
013	1.2.2.0	jema2UpsSecondsOnBattery	NonNegativeInteger	read-only	seconds	If the unit is on battery power, the elapsed time since the UPS last switched to battery power, or the time since the network management subsystem was last restarted, whichever is less. Zero shall be returned if the unit is not on battery power.
014	1.2.3.0	jema2UpsEstimatedMinutesRemaining	PositiveInteger	read-only	minutes	An estimate of the time to battery charge depletion under the present load conditions if the utility power is off and remains off, or if it were to be lost and remain off.
015	1.2.4.0	jema2UpsEstimatedChargeRemaining	INTEGER(0..100)	read-only	percent	An estimate of the battery charge remaining expressed as a percent of full charge.
016	1.2.5.0	jema2UpsBatteryVoltage	NonNegativeInteger	read-only	0.1 Volt DC	The magnitude of the present battery voltage.
017	1.2.6.0	jema2UpsBatteryCurrent	Integer32	read-only	0.1 Amp DC	The present battery current.
018	1.2.7.0	jema2UpsBatteryTemperature	Integer32	read-only	degrees Centigrade	The ambient temperature at or near the UPS Battery casing.
019	1.2.8.0	jema2UpsBatteryLastReplaceDate	DisplayString(SIZE(0..10))	read-write	yyyy-mm-dd	The date when the battery was replaced in yyyy-mm-dd format.The initial value shows the date of manufacture of the UPS, date of installation, etc.

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020	1.2.9.0	jema2UpsBatteryReplaceIndicator	INTEGER{ unknown(1), noBatteryNeedsReplacing(2), batteryNeedsReplacing(3) }	read-only	—	Battery replacement warning. unknown(1), no Battery Needs Replacing(2), battery Needs Replacing(3) Replacement remaining period recommended by the manufacturer. (When the period specified by jema2UpsBatteryLifeTimeRemaining is reached, "battery Needs Replacing(3)" is displayed.)
021	1.2.10.0	jema2UpsBatteryLifeTimeRemaining	NonNegativeInteger	read-only	month	Forecast the replacement remainder period.
022	1.2.11.0	jema2UpsBatteryChargeCurrent	NonNegativeInteger	read-only	0.1 Amp DC	The present battery charge current.
023	1.2.12.0	jema2UpsBatteryDischargeCurrent	NonNegativeInteger	read-only	0.1 Amp DC	The present battery discharge current.
024	1.2.13.0	jema2UpsBatteryType	INTEGER{ other(1), unknown(2), lead-acid(3), lithium-ion(4), alkaline(5) }	read-only	-	A kind of battery other(1): except below items unknown(2): unknown lead-acid(3): Lead acid lithium-ion(4): Lithium ion alkaline(5): Allaline
025	1.3	jema2UpsInput	—	—	—	—
026	1.3.1.0	jema2UpsInputLineBads	Counter32	read-only	—	A count of the number of times the input entered an out-of-tolerance condition as defined by the manufacturer. This count is incremented by one each time the input transitions from zero out-of-tolerance lines to one or more input lines out-of-tolerance.
027	1.3.2.0	jema2UpsInputNumLines	NonNegativeInteger	read-only	—	The number of input lines utilized in this device. This variable indicates the entry number in the input table.
028	1.3.3	jema2UpsInputTable	SEQUENCE OF Jema2UpsInputEntry	not-accessible	—	A list of input table entries. The number of entries is given by the value of jema2UpsInputNumLines.
029	1.3.3.1	jema2UpsInputEntry	Jema2UpsInputEntry	not-accessible	—	An entry containing information applicable to a particular input line.
030	1.3.3.1.1.(index)	jema2UpsInputLineIndex	PositiveInteger	not-accessible	—	The input line identifier.
031	1.3.3.1.2.(index)	jema2UpsInputFrequency	NonNegativeInteger	read-only	0.1 Hertz	The present input frequency.
032	1.3.3.1.3.(index)	jema2UpsInputVoltage	NonNegativeInteger	read-only	0.1 RMS Volts	The magnitude of the present input voltage. If input is singlePhase2Wire at jema2UpsInputPhase, the value indicates the effective (RMS) voltage. If not, it defined by manufacturer, for example, particular phase RMS/average/typical voltage.
033	1.3.3.1.4.(index)	jema2UpsInputCurrent	NonNegativeInteger	read-only	0.1 RMS Amp	The magnitude of the present input current. If input is singlePhase2Wire at jema2UpsInputPhase,the value indicates the effective (RMS) current. If not, it defined by manufacturer,for example, particular phase RMS/average/typical current.
034	1.3.3.1.5.(index)	jema2UpsInputTruePower	NonNegativeInteger	read-only	Watts	The magnitude of the present input true power.
035	1.3.3.1.6(index)	jema2UpsInputWattHours	NonNegativeInteger	read-write	0.1 kWh	The magnitude of the input electorical energy.

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036	1.3.3.1.7(index)	jema2UpsInputPhase	INTEGER { unknown(1), singlePhase2Wire(2), singlePhase3Wire(3), threePhase3Wire(4), threePhase4Wire(5) }	read-only	—	The number of input phase. unknown(1): unknown singlePhase2Wire(2): single phase 2 wire system jema2UpsInputVoltage1; This value indicates the voltage between L-N. jema2UpsInputCurrent1; This value indicates the current of L. singlePhase3Wire(3): single phase 3 wire system jema2UpsInputVoltage1, 2, 3; These value indicate the voltages between L1-N, L2-N, L1-L2. jema2UpsInputCurrent1, 2; These value indicate the currents of L1, L2. threePhase3Wire(4): three phase 3 wire system jema2UpsInputVoltage1, 2, 3; These value indicate the voltages between L1-L2, L2-L3, L3-L1. jema2UpsInputCurrent1, 2, 3; These value indicate the currents of L1, L2, L3. threePhase4Wire(5): three phase 4 wire system jema2UpsInputVoltage 1, 2, 3, 4, 5, 6; These value indicate the voltages between L1-L2, L2-L3, L3-L1, L1-N, L2-N, L3-N. jema2UpsInputCurrent1, 2, 3, 4; These value indicate the currents of L1, L2, L3, N.
037	1.3.3.1.8.(index)	jema2UpsInputVoltage1	INTEGER32	read-only	0.1 RMS Volts	This value indicates the input voltage defined by jema2UpsInputPhase. The value -1 means unknown.
038	1.3.3.1.9.(index)	jema2UpsInputVoltage2	INTEGER32	read-only	0.1 RMS Volts	This value indicates the input voltage defined by jema2UpsInputPhase. The value -1 means unknown.
039	1.3.3.1.10.(index)	jema2UpsInputVoltage3	INTEGER32	read-only	0.1 RMS Volts	This value indicates the input voltage defined by jema2UpsInputPhase. The value -1 means unknown.
040	1.3.3.1.11.(index)	jema2UpsInputVoltage4	INTEGER32	read-only	0.1 RMS Volts	This value indicates the input voltage defined by jema2UpsInputPhase. The value -1 means unknown.
041	1.3.3.1.12.(index)	jema2UpsInputVoltage5	INTEGER32	read-only	0.1 RMS Volts	This value indicates the input voltage defined by jema2UpsInputPhase. The value -1 means unknown.
042	1.3.3.1.13.(index)	jema2UpsInputVoltage6	INTEGER32	read-only	0.1 RMS Volts	This value indicates the input voltage defined by jema2UpsInputPhase. The value -1 means unknown.
043	1.3.3.1.14.(index)	jema2UpsInputCurrent1	INTEGER32	read-only	0.1 RMS Amp	This value indicates the input current defined by jema2UpsInputPhase. The value -1 means unknown.
044	1.3.3.1.15.(index)	jema2UpsInputCurrent2	INTEGER32	read-only	0.1 RMS Amp	This value indicates the input current defined by jema2UpsInputPhase. The value -1 means unknown.
045	1.3.3.1.16.(index)	jema2UpsInputCurrent3	INTEGER32	read-only	0.1 RMS Amp	This value indicates the input current defined by jema2UpsInputPhase. The value -1 means unknown.
046	1.3.3.1.17.(index)	jema2UpsInputCurrent4	INTEGER32	read-only	0.1 RMS Amp	This value indicates the input current defined by jema2UpsInputPhase. The value -1 means unknown.
047	1.4	jema2UpsOutput	—	—	—	—

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048	1.4.1.0	jema2UpsOutputSource	INTEGER { other(1), none(2), normal(3), bypass(4), battery(5), booster(6), reducer(7) }	read-only	—	Status of power supply for output other(1) : except below items none(2) : no output There is no source of output power (and therefore no output power), for example, the system has opened the output breaker. normal(3) : normal running There is normal output when input is normal. bypass(4) : output with bypass There is bypass output when input is normal. battery(5): running on battery There is on-battery operation. booster(6): running on booster here is boosted output voltage when input voltage is low. reducer(7): running on reducer There is reduced output voltage when input voltage is high.
049	1.4.2.0	jema2UpsOutputFrequency	NonNegativeInteger	read-only	0.1 Hertz	The present output frequency.
050	1.4.3.0	jema2UpsOutputNumLines	NonNegativeInteger	read-only	—	The number of output lines utilized in this device. This variable indicates the entry number in the output table(jema2UpsOutputTable).
051	1.4.4	jema2UpsOutputTable	SEQUENCE OF Jema2UpsOutputEntry	not-accessible	—	A list of output table entries. The number of entries is given by the value of jema2UpsOutputNumLines.
052	1.4.4.1	jema2UpsOutputEntry	Jema2UpsOutputEntry	not-accessible	—	An entry containing information applicable to a particular output line.
053	1.4.4.1.1.(index)	jema2UpsOutputLineIndex	PositiveInteger	not-accessible	—	The output line identifier.
054	1.4.4.1.2.(index)	jema2UpsOutputVoltage	NonNegativeInteger	read-only	0.1 RMS Volts	The magnitude of the present output voltage. f output is singlePhase2Wire at jema2UpsOutputPhase,the voltage indicates the effective (RMS) voltage. If not, it defined by manufacturer,for example,particular phase RMS/average/typical voltage.
055	1.4.4.1.3.(index)	jema2UpsOutputCurrent	NonNegativeInteger	read-only	0.1 RMS Amp	The magnitude of the present output current. f output is singlePhase2Wire at jema2UpsOutputPhase,the value indicates the effective (RMS) current. If not, it defined by manufacturer, for example,particular phase RMS/average/typical current.
056	1.4.4.1.4.(index)	jema2UpsOutputPower	NonNegativeInteger	read-only	Watts	The magnitude of the present output true power.
057	1.4.4.1.5.(index)	jema2UpsOutputPercentLoad	INTEGER(0..200)	read-only	percent	The percentage of the UPS power capacity presently being used on this output line.
058	1.4.4.1.6	jema2UpsOutputOutWattHours	NonNegativeInteger	read-write	0.1 kWh	The magnitude of the output electorical energy.
059	1.4.4.1.7.(index)	jema2UpsOutputOutPowerfactor	INTEGER(0..100)	read-only	0.01	Output power factor of the UPS.
060	1.4.4.1.8.(index)	jema2UpsOutputStatus	INTEGER { unknown(1), none(2), normal(3), }	read-only	—	The state of output lines utilized in this device. unknown(1): unknown state none(2): no output There is no output power in the line. none(2): no output There is normal output in the line.

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061	1.4.4.1.9.(index)	jema2UpsOutputPhase	INTEGER { unknown(1), singlePhase2Wire(2), singlePhase3Wire(3), threePhase3Wire(4), threePhase4Wire(5) }	read-only	—	The number of output phase. unknown(1): unknown singlePhase2Wire(2): single phase 2 wire system singlePhase3Wire(3): single phase 3 wire system threePhase3Wire(4): three phase 3 wire system threePhase4Wire(5): three phase 4 wire system
062	1.4.4.1.10.(index)	jema2UpsOutputVoltage1	INTEGER32	read-only	0.1 RMS Volts	This value indicates the output voltage defined by jema2UpsOutputPhase. The value -1 means unknown.
063	1.4.4.1.11.(index)	jema2UpsOutputVoltage2	INTEGER32	read-only	0.1 RMS Volts	This value indicates the output voltage defined by jema2UpsOutputPhase. The value -1 means unknown.
064	1.4.4.1.12.(index)	jema2UpsOutputVoltage3	INTEGER32	read-only	0.1 RMS Volts	This value indicates the output voltage defined by jema2UpsOutputPhase. The value -1 means unknown.
065	1.4.4.1.13.(index)	jema2UpsOutputVoltage4	INTEGER32	read-only	0.1 RMS Volts	This value indicates the output voltage defined by jema2UpsOutputPhase. The value -1 means unknown.
066	1.4.4.1.14.(index)	jema2UpsOutputVoltage5	INTEGER32	read-only	0.1 RMS Volts	This value indicates the output voltage defined by jema2UpsOutputPhase. The value -1 means unknown.
067	1.4.4.1.15.(index)	jema2UpsOutputVoltage6	INTEGER32	read-only	0.1 RMS Volts	This value indicates the output voltage defined by jema2UpsOutputPhase. The value -1 means unknown.
068	1.4.4.1.16.(index)	jema2UpsOutputCurrent1	INTEGER32	read-only	0.1 RMS Amp	This value indicates the output current defined by jema2UpsOutputPhase. The value -1 means unknown.
069	1.4.4.1.17.(index)	jema2UpsOutputCurrent2	INTEGER32	read-only	0.1 RMS Amp	This value indicates the output current defined by jema2UpsOutputPhase. The value -1 means unknown.
070	1.4.4.1.18.(index)	jema2UpsOutputCurrent3	INTEGER32	read-only	0.1 RMS Amp	This value indicates the output current defined by jema2UpsOutputPhase. The value -1 means unknown.
071	1.4.4.1.19.(index)	jema2UpsOutputCurrent4	INTEGER32	read-only	0.1 RMS Amp	This value indicates the output current defined by jema2UpsOutputPhase. The value -1 means unknown.
072	1.4.4.1.20.(index)	jema2UpsOutputPercentLoad1	INTEGER(-1..200)	read-only	percent	This value indicates the present load defined by jema2UpsOutputPhase. The value -1 means unknown.
073	1.4.4.1.21.(index)	jema2UpsOutputPercentLoad2	INTEGER(-1..200)	read-only	percent	This value indicates the present load defined by jema2UpsOutputPhase. The value -1 means unknown.
074	1.4.4.1.22.(index)	jema2UpsOutputPercentLoad3	INTEGER(-1..200)	read-only	percent	This value indicates the present load defined by jema2UpsOutputPhase. The value -1 means unknown.
075	1.5	jema2UpsBypass	—	—	—	—
076	1.5.1.0	jema2UpsBypassFrequency	NonNegativeInteger	read-only	0.1 Hertz	The present bypass frequency.
077	1.5.2.0	jema2UpsBypassNumLines	NonNegativeInteger	read-only	—	The number of bypass lines utilized in this device. This variable indicates the entry number in the bypass table(jema2UpsBypassTable).
078	1.5.3	jema2UpsBypassTable	SEQUENCE OF Jema2UpsBypassEntry	not-accessible	—	A list of bypass table entries. The number of entries is given by the value of Jema2UpsBypassNumLines.
079	1.5.3.1	jema2UpsBypassEntry	Jema2UpsBypassEntry	not-accessible	—	An entry containing information applicable to a particular bypass line.
080	1.5.3.1.1.(index)	jema2UpsBypassLineIndex	PositiveInteger	not-accessible	—	The bypass line identifier.

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081	1.5.3.1.2.(index)	jema2UpsBypassVoltage	NonNegativeInteger	read-only	0.1 RMS Volts	The magnitude of the present bypass voltage. If bypass is singlePhase2Wire at Jema2UpsBypassPhase, the voltage indicates the effective (RMS) voltage. If not, it defined by manufacturer, for example, particular phase RMS/average/typical voltage.
082	1.5.3.1.3.(index)	jema2UpsBypassCurrent	NonNegativeInteger	read-only	0.1 RMS Amp	The magnitude of the present bypass current. If bypass is singlePhase2Wire at Jema2UpsBypassPhase, the value indicates the effective (RMS) current. If not, it defined by manufacturer, for example, particular phase RMS/average/typical current.
083	1.5.3.1.4.(index)	jema2UpsBypassPower	NonNegativeInteger	read-only	Watts	The magnitude of the present bypass true power.
084	1.5.3.1.5.(index)	jema2UpsBypassPhase	INTEGER { unknown(1), singlePhase2Wire(2), singlePhase3Wire(3), threePhase3Wire(4), threePhase4Wire(5), noBypass(6) }	read-only	—	The number of input phase. unknown(1) : unknown singlePhase2Wire(2): single phase 2 wire system singlePhase3Wire(3): single phase 3 wire system threePhase3Wire(4): three phase 3 wire system threePhase4Wire(5): three phase 4 wire system no Bypass(6)
085	1.5.3.1.6.(index)	jema2UpsBypassVoltage1	INTEGER32	read-only	0.1 RMS Volts	This value indicates the bypass voltage defined by jema2UpsBypassPhase. The value -1 means unknown.
086	1.5.3.1.7.(index)	jema2UpsBypassVoltage2	INTEGER32	read-only	0.1 RMS Volts	This value indicates the bypass voltage defined by jema2UpsBypassPhase. The value -1 means unknown.
087	1.5.3.1.8.(index)	jema2UpsBypassVoltage3	INTEGER32	read-only	0.1 RMS Volts	This value indicates the bypass voltage defined by jema2UpsBypassPhase. The value -1 means unknown.
088	1.5.3.1.9.(index)	jema2UpsBypassVoltage4	INTEGER32	read-only	0.1 RMS Volts	This value indicates the bypass voltage defined by jema2UpsBypassPhase. The value -1 means unknown.
089	1.5.3.1.10.(index)	jema2UpsBypassVoltage5	INTEGER32	read-only	0.1 RMS Volts	This value indicates the bypass voltage defined by jema2UpsBypassPhase. The value -1 means unknown.
090	1.5.3.1.11.(index)	jema2UpsBypassVoltage6	INTEGER32	read-only	0.1 RMS Volts	This value indicates the bypass voltage defined by jema2UpsBypassPhase. The value -1 means unknown.
091	1.5.3.1.12.(index)	jema2UpsBypassCurrent1	INTEGER32	read-only	0.1 RMS Amp	This value indicates the bypass current defined by jema2UpsBypassPhase. The value -1 means unknown.
092	1.5.3.1.13.(index)	jema2UpsBypassCurrent2	INTEGER32	read-only	0.1 RMS Amp	This value indicates the bypass current defined by jema2UpsBypassPhase. The value -1 means unknown.
093	1.5.3.1.14.(index)	jema2UpsBypassCurrent3	INTEGER32	read-only	0.1 RMS Amp	This value indicates the bypass current defined by jema2UpsBypassPhase. The value -1 means unknown.
094	1.5.3.1.15.(index)	jema2UpsBypassCurrent4	INTEGER32	read-only	0.1 RMS Amp	This value indicates the bypass current defined by jema2UpsBypassPhase. The value -1 means unknown.
095	1.5.3.1.16.(index)	jema2UpsBypassPercentLoad1	INTEGER(-1..200)	read-only	percent	This value indicates the present load defined by jema2UpsBypassPhase. The value -1 means unknown.
096	1.5.3.1.17.(index)	jema2UpsBypassPercentLoad2	INTEGER(-1..200)	read-only	percent	This value indicates the present load defined by jema2UpsBypassPhase. The value -1 means unknown.
097	1.5.3.1.18.(index)	jema2UpsBypassPercentLoad3	INTEGER(-1..200)	read-only	percent	This value indicates the present load defined by jema2UpsBypassPhase. The value -1 means unknown.
098	1.6	jema2UpsAlarm	—	—	—	—

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099	1.6.1.0	jema2UpsAlarmFatalFaultStatus	INTEGER(-1..2147483648)	read-only	—	The fatal fault in the UPS has been detected. Detailed information is obtained by referring to jema2UpsAlarmFatalFaultDetail. -1: Fatal fault none 1: Abnormal output 2: Main circuit failure 3: Fuse blown 4: Fan fault 5: Abnormal control 6: Abnormal battery 7-999: Reservation 1000- : Others(The content is defined by manufacturers.)
100	1.6.2.0	jema2UpsAlarmFatalFaultDetail	DisplayString(SIZE(0..511))	read-only	—	Detailed information on Jema2UpsAlarmFatalFaultStatus is given by the character string. The content of detailed information is defined by manufacturers.
101	1.6.3.0	jema2UpsAlarmFaultStatus	INTEGER(-1..65535)	read-only	—	The fault in the UPS has been detected. Detailed information is obtained by referring to jemaUpsAlarmFaultDetail. -1: Fault none 1: Abnormal input 2: Abnormal bypass 3: Abnormal battery 4-999: Reservation 1000-: Others(The content is defined by manufacturers.)
102	1.6.4.0	jema2UpsAlarmFaultDetail	DisplayString(SIZE(0..511))	read-only	—	Detailed information on Jema2UpsAlarmFaultStatus is given by the character string. The content of detailed information is defined by manufacturers.
103	1.6.5.0	jema2UpsAlarmWarningStatus	INTEGER { none(-1), occurred(1) }	read-only	—	The warning in the UPS has been detected. Detailed information is obtained by referring to jemaUps2AlarmWarningDetail. none(-1), occurred(1)
104	1.6.6.0	jema2UpsAlarmWarningDetail	DisplayString(SIZE(0..511))	read-only	—	Detailed information on jema2UpsAlarmWarningStatus is given by the character string. The content of detailed information is defined by manufacturers.
105	1.6.7.0	jema2UpsAlarmCautionDetail	DisplayString(SIZE(0..511))	read-only	—	Caution detailed information from UPS is given by the character string. The content of detailed information is defined by manufacturers.
106	1.6.8.0	jema2UpsAlarmInputBadStatus	INTEGER { none(-1), occurred(1) }	read-only	—	An abnormal condition of input in the UPS has been detected. Detailed information is obtained by referring to jema2UpsAlarm InputBadDetail. none(-1), occurred(1)
107	1.6.9.0	jema2UpsAlarmInputBadDetail	DisplayString(SIZE(0..511))	read-only	—	Detailed information on jema2UpsAlarmInputBadStatus is given by the character string. The content of detailed information is defined by manufacturers.
108	1.6.10.0	jema2UpsAlarmOutputOverloadStatus	INTEGER { none(-1), occurred(1) }	read-only	—	The output overload in the UPS has been detected. none(-1), occurred(1)

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109	1.6.11.0	jema2UpsAlarmBatteryBadStatus	INTEGER { none(-1), occurred(1) }	read-only	—	An abnormal condition of the battery in the UPS has been detected. The battery needs to be replaced. If jema2UpsBatteryReplaceIndicator is 3, this abnormal condition of the battery is detected in either of the following cases: - The battery replacement is needed at jema2UpsTestQuickBatteryTest or jema2UpsTestDeepBatteryCalibration. - The battery replacement is determined by the self-diagnosis function of other UPS's. Detailed information is obtained by referring to jema2UpsAlarmBatteryBadDetail. none(-1), occurred(1)
110	1.6.12.0	jema2UpsAlarmBatteryBadDetail	DisplayString(SIZE(0..511))	read-only	—	Detailed information on jema2UpsAlarmBatteryBadStatus is given by the character string. The content of detailed information is defined by manufacturers. e.g. [Battery life end] Battery run time exceeded 5 years.
111	1.6.13.0	jema2UpsAlarmTempBadStatus	INTEGER { none(-1), occurred(1) }	read-only	—	An abnormal temperature of the UPS has been detected. Detailed information is obtained by referring to jema2UpsAlarmTempBadDetail. none(-1), occurred(1)
112	1.6.14.0	jema2UpsAlarmTempBadDetail	DisplayString(SIZE(0..511))	read_only	—	Detailed information on jema2UpsAlarmTempBadStatus is given by the character string. The content of detailed information is defined by manufacturers. e.g. [Over-heated] Tmeparature is Fin temperature exceeded 100 degrees (C).
113	1.6.15.0	jema2UpsAlarmCommunicationsLostStatus	INTEGER { none(-1), occurred(1) }	read-only	—	A communication status of the UPS and SNMP agent has been detected. none(-1) occurred(1)
114	1.7	jema2UpsTest	—	—	—	—
115	1.7.1.0	jema2UpsTestId	OBJECT IDENTIFIER	read-write	—	The test is named by an OBJECT IDENTIFIER, which allows a standard mechanism for the initiation of tests, including the well known tests identified in this document as well as those introduced by a particular implementation. Setting this variable initiates the named test. Sets to this variable require the presence of jema2UpsTesId and jema2UpsTestSpinLock in the same SNMP message. The set request will be rejected with an appropriate error message if the requested test cannot be performed, including attempts to start a test when another test is already in progress. The status of the current or last test is maintained in jema2UpsTestResultsSummary. Tests in progress may be aborted by setting the jema2UpsTestId variable to jema2UpsTestAbortTestInProgress. Read operations return the value of the name of the test in progress if a test is in progress or the name of the last test performed. If no test is in progress, unless no test has been run, in which case the well known value jema2UpsTestNoTestsInitiated is returned.

No.	Index	NAME	SYNTAX	MAX-ACCESS	Unit	Description
116	1.7.2.0	jema2UpsTestSpinLock	TestAndIncr	read-write	—	<p>The jema2UpsTestSpinLock is used in the exclusion control when plural manager stations request to set jema2UpsTestId at a time.</p> <p>Sets to jema2UpsTestSpinLock require the presence of jema2UpsTestId in the same SNMP message.</p> <p>Usage:</p> <p>Set (jema2UpsTestSpinLock = lock_value, jema2UpsTestId = test_id)</p> <p>To set jema2UpsTestSpinLock and jema2UpsTestId, follow the steps below:</p> <ol style="list-style-type: none"> 1. Fetch jema2UpsTestSpinLock. 2. Fetch jema2UpsTestResultSummary. 3. While jema2UpsTestResultSummary is being tested (InProgress), jema2UpsTestSpinLock and jema2UpsTestId cannot be set. Therefore, jema2UpsTestSpinLock and jema2UpsTestResultSummary are repeatedly fetched until the status is no longer being in progress. 4. Set jema2UpsTestSpinLock and jema2UpsTestId by one message. (Assign the latest value that was previously fetched to jema2UpsTestSpinLock.) 5. If the set request becomes an error (inconsistentValue), it may have been set by another manager before the set request was sent. Return to Step 1. 6. Completion of the test is determined according to the value of jema2UpsTestResultSummary. (Since the trap of when a test is completed (jema2UpsTrapTestCompleted) is not repeatedly output, there is a possibility that it cannot be fetched.) <p>If the current value of jema2UpsTestSpinLock equals 2147483647, then the variable is set to zero. The initial value of jema2UpsTestSpinLock at agent initialization shall be 1.</p> <p>Refer to RFC1903 for more information on the semantics of objects with SYNTAX of TestAndIncr. (SNMPv2-TC: TEXTUAL CONVENTION)</p>
117	1.7.3.0	jema2UpsTestResultsSummary	<pre>INTEGER { donePass(1), doneWarning(2), doneError(3), aborted(4), InProgress(5), noTestsInitiated(6) }</pre>	read-only	—	<p>The results of the current or last UPS diagnostics test performed</p> <p>The values for donePass(1), doneWarning(2), and doneError(3) indicate that the test completed either successfully. The value aborted(4) is returned for tests which are aborted by setting the value of jema2UpsTestAbortTestInProgress to jema2UpsTestId. Tests which have not yet concluded are indicated by InProgress(5). The value noTestsInitiated(6) indicates that no previous test results are available, such as is the case when no tests have been run since the last reinitialization of the network management subsystem and the system has no provision for non-volatile storage of test results.</p> <p>donePass(1): Normal doneWarning(2): Warning doneError(3): Error aborted(4): Aborted InProgress(5): In progress noTestsInitiated(6): No tests initiated"</p> <p>In the case of a warning or an error, the detailed information is available from jema2UpsTestResultsDetail.</p>
118	1.7.4.0	jema2UpsTestResultsDetail	DisplayString(SIZE(0..255))	read-only	—	<p>Additional information about jema2UpsTestResultsSummary.</p> <p>The content of detailed information is defined by manufactures as necessary.</p> <p>If no additional information available, a zero length string is returned.</p> <p>e.g. Battery voltage dropped below 35 V during UPS self diagnosis.</p>
119	1.7.5.0	jema2UpsTestStartTime	TimeStamp	read-only	—	<p>The value of sysUpTime at the time the test in progress was initiated, or, if no test is in progress, the time the previous test was initiated.</p> <p>If the value of jema2UpsTestResultsSummary is noTestsInitiated(6), jema2UpsTestStartTime has the value 0.</p>
120	1.7.6.0	jema2UpsTestElapsedTime	TimeInterval	read-only	—	<p>The amount of time, in TimeTicks, since the test in progress was initiated, or, if no test is in progress, the previous test took to complete.</p> <p>If the value of jema2UpsTestResultsSummary is noTestsInitiated(6), jema2UpsTestElapsedTime has the value 0.</p>
121	1.7.7	jema2UpsWellKnownTests	—	—	—	—

No.	Index	NAME	SYNTAX	MAX-ACCESS	Unit	Description
122	1.7.7.1	jema2UpsTestNoTestsInitiated	—	—	—	No tests have been initiated and no test is in progress.
123	1.7.7.2	jema2UpsTestAbortTestInProgress	—	—	—	The test in progress is to be aborted / the test in progress was aborted.
124	1.7.7.3	jema2UpsTestGeneralSystemsTest	—	—	—	The manufacturer's standard test of UPS device systems.
125	1.7.7.4	jema2UpsTestQuickBatteryTest	—	—	—	A test that is sufficient to determine if the battery needs replacement.
126	1.7.7.5	jema2UpsTestDeepBatteryCalibration	—	—	—	The system is placed on battery to a discharge level, set by the manufacturer, sufficient to determine battery replacement and battery run-time with a high degree of confidence. WARNING: This test will leave the battery in a low charge state and will require time for recharging to a level sufficient to provide normal battery duration for the protected load.
127	1.8	jema2UpsControl	—	—	—	—
128	1.8.1.0	jema2UpsShutdownType	INTEGER { output(1), system(2) }	read-write	—	Shutdown type of UPS when the all outputs turn off. output(1): Output off system(2): System off All output decides an action when it was being off. Setting this object to output(1) indicates that shutdown requests should cause only the output of the UPS to turn off. Setting this object to system(2) indicates that shutdown requests will cause the entire UPS system to turn off.
129	1.8.2.0	jema2UpsOutputControlNumLines	NonNegativeInteger	read-only	—	The number of output lines are used as the object of output control. This variable indicates the entry number in the output control table.
130	1.8.3	jema2UpsOutputControlTable	SEQUENCE OF Jema2UpsOutputControlEntry	not-accessible	—	A list of output control table entries
131	1.8.3.1	jema2UpsOutputControlEntry	Jema2UpsOutputControlEntry	not-accessible	—	An entry containing information applicable to a particular output control line
132	1.8.3.1.1.(Index)	jema2UpsOutputControlLineIndex	PositiveInteger	not-accessible	—	The output control line identifier
133	1.8.3.1.2.(Index)	jema2UpsShutdownAfterDelay	INTEGER(-1..2147483648)	read-write	seconds	Setting this object will shutdown the UPS output specified by index. Each output line turns off after the indicated number of seconds. Setting this object to 0 will cause the shutdown to occur immediately. Setting this object to -1 will abort the countdown. If the output is already in the off state at the time the countdown reaches 0, then nothing will happen. When read, jema2UpsShutdownAfterDelay will return the number of seconds remaining until shutdown, or -1 if no shutdown countdown is in effect.
134	1.8.3.1.3.(Index)	jema2UpsStartupAfterDelay	INTEGER(-1..2147483648)	read-write	seconds	Setting this object will start the UPS output specified by index after the indicated number of seconds, including starting the UPS, if necessary. Setting this object to 0 will cause the startup to occur immediately. Setting this object to -1 will abort the countdown. If the output is already on at the time the countdown reaches 0, then nothing will happen. When read, jema2UpsStartupAfterDelay will return the number of seconds until startup, or -1 if no startup countdown is in effect.
135	1.8.3.1.4.(Index)	jema2UpsRebootWithDuration	INTEGER(-1..300)	read-write	seconds	Setting this object will immediately shutdown the UPS output specified by index for a period equal to the indicated number of seconds, after which time the output will be started, including starting the UPS, if necessary. When read, jema2UpsRebootWithDuration shall return the number of seconds remaining in the countdown, or -1 if no countdown is in progress.
136	1.8.3.1.5.(Index)	jema2UpsAutoRestart	INTEGER { on(1), off(2) }	read-write	—	jemaUpsAutoRestart on(1) off(2) Setting this object to 'on' will cause the UPS system to restart after a shutdown if the shutdown occurred during a power loss as a result of either a jemaUpsShutdownAfterDelay or an internal battery depleted condition. Setting this object to 'off' will prevent the UPS system from restarting after a shutdown until an operator manually or remotely explicitly restarts it. If the UPS is in a startup or reboot countdown, then the UPS will not restart until that delay has been satisfied.
137	1.9	jema2UpsConfig	—	—	—	—

No.	Index	NAME	SYNTAX	MAX-ACCESS	Unit	Description
138	1.9.1.0	jema2UpsConfigInputVoltage	NonNegativeInteger	read-write	0.1 RMS Volts	The magnitude of the nominal input voltage. On those systems which support read-write access to this object, if there is an attempt to set this variable to a value that is not supported, the request must be rejected and the agent shall respond with an appropriate error message, i.e., badValue for SNMPv1, or inconsistentValue for SNMPv2.
139	1.9.2.0	jema2UpsConfigInputFreq	NonNegativeInteger	read-write	0.1 Hertz	The nominal input frequency. On those systems which support read-write access to this object, if there is an attempt to set this variable to a value that is not supported, the request must be rejected and the agent shall respond with an appropriate error message, i.e., badValue for SNMPv1, or inconsistentValue for SNMPv2. In case that the UPS distinguishes the frequency of utility power automatically, the agent shall respond with a value of the frequency that the UPS detects.
140	1.9.3.0	jema2UpsConfigOutputVoltage	NonNegativeInteger	read-write	0.1 RMS Volts	The magnitude of the nominal output voltage. On those systems which support read-write access to this object, if there is an attempt to set this variable to a value that is not supported, the request must be rejected and the agent shall respond with an appropriate error message, i.e., badValue for SNMPv1, or inconsistentValue for SNMPv2.
141	1.9.4.0	jema2UpsConfigOutputFreq	NonNegativeInteger	read-write	0.1 Hertz	The nominal output frequency. On those systems which support read-write access to this object, if there is an attempt to set this variable to a value that is not supported, the request must be rejected and the agent shall respond with an appropriate error message, i.e., badValue for SNMPv1, or inconsistentValue for SNMPv2. In case that the UPS distinguishes the frequency of utility power automatically, the agent shall respond with a value of the frequency that the UPS detects. In case that the output frequency is fixed to 50Hz or 60Hz, the agent shall respond with the fixed value regardless of the frequency of utility power.
142	1.9.5.0	jema2UpsConfigOutputVA	NonNegativeInteger	read-only	Volt-Amps	The magnitude of the nominal Volt-Amp rating.
143	1.9.6.0	jema2UpsConfigOutputPower	NonNegativeInteger	read-only	Watts	The magnitude of the nominal true power rating.
144	1.9.7.0	jema2UpsConfigLowBattTime	NonNegativeInteger	read-write	minutes	The value of jemaUpsEstimatedMinutesRemaining for declaring batteryLow(3) of jemaUpsBatteryStatus For agents which support only discrete (discontinuous) values, then the agent shall round up to the next supported value. If the requested value is larger than the largest supported value, then the largest supported value shall be selected.
145	1.9.8.0	jema2UpsConfigAudibleStatus	INTEGER { disabled(1), enabled(2), muted(3) }	read-write	—	buzzer ON/OFF disabled(1) :Disabled buzzer operation. enabled(2) :Enabled buzzer operation. muted(3) :Silence alarm temporarily. To be enabled or disabled for buzzer operation is specified. When in the disabled state, the audible alarm should never sound regardless of abnormal condition. When in the enabled state, the audible alarm is sounding during abnormal condition. Setting this object to muted(3) when the audible alarm is sounding shall temporarily silence the alarm. It will remain muted until the next abnormal condition would occur and the value returned for read operations during this period shall equal muted(3). At the end of this period, the value shall revert to enabled(2). Writes of the value muted(3) when the audible alarm is not sounding shall be accepted but otherwise shall have no effect.
146	1.9.9.0	jema2UpsConfigLowVoltageTransferPoint	NonNegativeInteger	read-write	0.1 RMS Volts	The minimum input line voltage allowed before the UPS system transfers to battery backup.
147	1.9.10.0	jema2UpsConfigHighVoltageTransferPoint	NonNegativeInteger	read-write	0.1 RMS Volts	The maximum line voltage allowed before the UPS system transfers to battery backup.

No.	Index	NAME	SYNTAX	MAX-ACCESS	Unit	Description
148	1.9.11.0	jema2UpsConfigTransferTrapControl	INTEGER { fatalFault (1), fault(2), warning(3), all(4) }	read-write	—	The 4 levels of sending traps to the manager. To be enabled/disabled to send the following 6 kinds of traps is specified, according to degree of importance. jemaUpsTrapFatalFault jemaUpsTrapFault jemaUpsTrapFaultRemoved jemaUpsTrapWarning jemaUpsTrapWarningRemoved jemaUpsTrapCaution fatalFault(1):Send jemaUpsTrapFatalFault. fault(2):Send jemaUpsTrapFatalFault,jemaUpsTrapFault,jemaUpsTrapFaultRemoved. warning(3):Send jemaUpsTrapFatalFault,jemaUpsTrapFault,jemaUpsTrapFaultRemoved, jemaUpsTrapWarning,jemaUpsTrapWarningRemoved. all(4):Send all 6 traps.
149	1.9.12.0	jema2UpsConfigIntervalTrapControl	INTEGER { disabled (1), enabled (2), muted (3), }	read-write	—	The jemaUpsTrapAny control. Trap transfer is controlled. disabled(1):Disable to send jemaUpsTrapAny enabled(2) :Enable to send jemaUpsTrapAny muted(3) :Muted to send jemaUpsTrapAny When in the muted(3), it will remain muted until at least, one of the following 7 Statuses would change. At the end of this period, the value shall revert to enabled(2) from muted(3). jemaUpsAlarmFatalFaultStatus, jemaUpsAlarmFaultStatus jemaUpsAlarmWarningStatus, jemaUpsAlarmInputBadStatus jemaUpsAlarmOutputOverloadStatus, jemaUpsAlarmBatteryBadStatus jemaUpsAlarmTempBadStatus
150	1.9.13.0	jema2UpsConfigIntervalTrapTime	INTEGER(5..2147483648)	read-write	seconds	The interval time of traps to be sent. jemaUpsTrapBatteryLow and jemaUpsTrapAny are resent at this interval time.
151	1.10	jema2UpsBit	—	—	—	—
152	1.10.1.0	jema2UpsBitFatalFault	OCTSTR(256)	read-only	—	Detailed fatal fault which occurs as bit strings. Each bit means will be determined by manufacturer. e.g. In case of No.1 and No.3 is occurred, ...0000000000000005
153	1.10.2.0	jema2UpsBitFatalFaultDetail	DisplayString(SIZE(0..511))	read-only	—	Detailed information on fatal fault which occurs as character strings. In case of multiple faults occurred at the same time, write them in bit sequence of jema2UpsBitFatalFault and separate them with comma. If character strings is more than 512 bytes, it will omit the following. Detail information of contents and format is determined by manufacturer. e.g. In case of No.1 fatal fault (fan abnormal), No.3 fatal fault(DC overvoltage)is occurred, {Cooling fan abnormal,DC overvoltage}
154	1.10.3.0	jema2UpsBitFault	OCTSTR(256)	read-only	—	Detailed fault which occurs as bit strings. Each bit means will be determined by manufacturer. e.g. In case of No.1 and No.3 fault is occurred, ...0000000000000005

No.	Index	NAME	SYNTAX	MAX-ACCESS	Unit	Description
155	1.10.4.0	jema2UpsBitFaultDetail	DisplayString(SIZE(0..511))	read-only	—	Detailed information on fault which occurs as character strings. In case of multiple fault is occurred at same time, write them in bit sequence of jema2UpsBitFault and separate them with comma. Detail information of contents and format is determined by manufacturer. e.g. In case of No.1 fault (battery over temperature) , No.3 fatal fault(back up power abnormal)is ocured, {Battery Over Temperature,DC Control power supply abnormal}
156	1.10.5.0	jema2UpsBitWarning	OCTSTR(256)	read-only	—	Detailed warning which occurs as bit strings. Meaning of each bit is determined by manufacturer. e.g. In case of No.1 and No.3 is occurred, ...0000000000000005
157	1.10.6.0	jema2UpsBitWarningDetail	DisplayString(SIZE(0..511))	read-only	—	Detailed information warning which occurs as charactor strings. In case of mltiple warining occurred at the same time, write them in bit sequence of jema2UpsBitWarning and separate them with comma. If charactor strings is more than 512 bytes, omit the following Detail information of contents and format is determined by manufacturer. e.g. In case of No.1 warning (converter overload), No.3 warning(commercial power supply abnormal)is ocured, {Converter Overload,Input power failure}
158	1.10.7.0	jema2UpsBitStatus	OCTSTR(256)	read-only	—	Detailed condition of UPS as bit strings. Each bit means will be determined by manufacturer. e.g. In case of Condition1 ON, Condition2 ON, Condition3 ON, Condition4 ON, Condition 5 off, Condition 6 is ON, ...0000000000000027
159	1.10.8.0	jema2UpsBitStatusDetail	DisplayString(SIZE(0..511))	read-only	—	Detailed information condition of UPS as charactor strings. In case of multiple fault occurred at the same time, write them in bit sequence of Jema2UpsBitStatus and separate them with comma. Detail infortmation of contents and format is determined by manufacturer. e.g. In case of Condition 1(Inverter operation: ON) Condition 2(Converter operation: ON) Condition 3(Load on Inverter: ON) Condition 4(Load on BYP OFF) is occurred, {Inverter Operation:ON,Converter Operation:ON, Load On inverter:ON,Load on bypass:OFF}
160	1.11	jema2UpsUnit	—	—	—	—
161	1.11.1.0	jema2UpsNumUnits	NonNegativeInteger	read-only	—	The number of unit utilized in this device. This variable indicates the entry number in the identification(jema2UpsUnitIdentTable) , battery(jema2UpsUnitBatteryTable), input(jema2UpsUnitInputTable), output(jema2UpsUnitOutputTable), bypass(jema2UpsUnitBypassTable), and alarm(jema2UpsUnitAlarmTable) of each unit.
162	1.11.2	jema2UpsUnitIdentTable	SEQUENCE OF Jema2UpsUnitIdentEntry	not-accessible	—	A list of unit table entries. The number of entries is given by the value of jema2UpsNumUnits.
163	1.11.2.1	jema2UpsUnitIdentEntry	Jema2UpsUnitIdentEntry	not-accessible	—	An entry containing information applicable to a particular unit.
164	1.11.2.1.1.(index)	jema2UpsUnitIndex	PositiveInteger	not-accessible	—	The UPS Unit idenfifier.
165	1.11.2.1.2.(index)	jema2UpsUnitIdentModel	DisplayString(SIZE(0..63))	read-only	—	The Unit Model designation.
166	1.11.2.1.3.(index)	jema2UpsUnitIdentUnitSoftwareVersion	DisplayString(SIZE(0..63))	read-only	—	The unit firmware/software version(s). This variable may or may not have the same value as jema2UpsUnitIdentAgentSoftwareVersion in some implementations.
167	1.11.2.1.4.(index)	jema2UpsUnitIdentName	DisplayString(SIZE(0..63))	read-write	—	A string identifying the unit. This object should be set by the administrator.
168	1.11.2.1.5.(index)	jema2UpsUnitIdentManufacturedNumber	DisplayString(SIZE(0..63))	read-only	—	The manufacture number of the unit.
169	1.11.3	jema2UpsUnitBatteryTable	SEQUENCE OF Jema2UpsUnitBatteryEntry	not-accessible	—	A list of unit battery table entries. The number of entries is given by the value of jema2UpsNumUnits.

No.	Index	NAME	SYNTAX	MAX-ACCESS	Unit	Description
170	1.11.3.1	jema2UpsUnitBatteryEntry	Jema2UpsUnitBatteryEntry	not-accessible	—	An entry containing information applicable to a particular unit.
171	1.11.3.1.1.(index)	Jema2UpsUnitBatteryIndex	PositiveInteger	not-accessible	—	The UPS unit battery identifier.
172	1.11.3.1.2.(index)	jema2UpsUnitBatteryStatus	INTEGER { unknown(1), batteryNormal(2), batteryLow(3), batteryDepleted(4) }	read-only	—	The indication of the capacity remaining in the unit's batteries. unknown(1) batteryNormal(2) batteryLow(3) batteryDepleted(4) A value of batteryNormal indicates that the remaining run-time is greater than jema2UpsConfigLowBattTime. A value of batteryLow indicates that the remaining battery run-time is less than or equal to jema2UpsConfigLowBattTime. A value of batteryDepleted indicates that the unit will be unable to sustain the present load when and if the utility power is lost (including the possibility that the utility power is currently absent and the unit is unable to sustain the output).
173	1.11.3.1.3.(index)	jema2UpsUnitSecondsOnBattery	NonNegativeInteger	read-only	seconds	If the unit is on battery power, the elapsed time since the unit last switched to battery power, or the time since the network management subsystem was last restarted, whichever is less. Zero shall be returned if the unit is not on battery power.
174	1.11.3.1.4.(index)	jema2UpsUnitEstimatedMinutesRemaining	PositiveInteger	read-only	minutes	An estimate of the time to battery charge depletion under the present load conditions if the utility power is off and remains off, or if it were to be lost and remain off.
175	1.11.3.1.5.(index)	jema2UpsUnitEstimatedChargeRemaining	INTEGER(0..100)	read-only	percent	An estimate of the battery charge remaining expressed as a percent of full charge.
176	1.11.3.1.6.(index)	jema2UpsUnitBatteryVoltage	NonNegativeInteger	read-only	0.1 Volt DC	The magnitude of the resent battery voltage.
177	1.11.3.1.7.(index)	jema2UpsUnitBatteryCurrent	Integer32	read-only	0.1 Amp DC	The present battery current.
178	1.11.3.1.8.(index)	jema2UpsUnitBatteryTemperature	Integer32	read-only	degrees Centigrade	The ambient temperature at or near the Unit Battery casing
179	1.11.3.1.9.(index)	jema2UpsUnitBatteryLastReplaceDate	DisplayString(SIZE(0..10))	read-write	yyyy-mm-dd	The date when the battery was replaced in yyyy-mm-dd format. The default value shows manufacturing date or installation date of UPS.
180	1.11.3.1.10.(index)	jema2UpsUnitBatteryReplaceIndicator	INTEGER{ unknown(1), noBatteryNeedsReplacing(2), batteryNeedsReplacing(3) }	read-only	—	Battery replacement warning unknown(1) no Battery Needs Replacing(2) battery Needs Replacing(3) battery Needs Replacing(3) is displayed when the replacement remainder period reaches the period recommended by manufacturer (period defined by jema2UpsUnitBatteryLifeTimeRemaining).
181	1.11.3.1.11.(index)	jema2UpsUnitBatteryLifeTimeRemaining	NonNegativeInteger	read-only	month	Forecast the replacement remainder period.
182	1.11.4	jema2UpsUnitInputTable	SEQUENCE OF Jema2UpsUnitInputEntry	not-accessible	—	A list of unit input table entries. The number of entries is given by the value of jema2UpsNumUnits.
183	1.11.4.1	jema2UpsUnitInputEntry	Jema2UpsUnitInputEntry	not-accessible	—	An entry containing information applicable to a particular unit.
184	1.11.4.1.1.(index)	jema2UpsUnitInputIndex	PositiveInteger	not-accessible	—	The UPS unit input identifier.
185	1.11.4.1.2.(index)	jema2UpsUnitInputFrequency	NonNegativeInteger	read-only	0.1 Hertz	The present input frequency.
186	1.11.4.1.3.(index)	jema2UpsUnitInputVoltage	NonNegativeInteger	read-only	0.1 RMS Volts	The magnitude of the present input voltage. If input is singlePhase2Wire at jema2UpsUnitInputPhase, the value indicates the effective (RMS) voltage. If not, it defined by manufacturer, for example, particular phase RMS/average/typical voltage.
187	1.11.4.1.4.(index)	jema2UpsUnitInputCurrent	NonNegativeInteger	read-only	0.1 RMS Amp	The magnitude of the present input current. If input is singlePhase2Wire at jema2UpsUnitInputPhase, the value indicates the effective (RMS) current. If not, it defined by manufacturer, for example, particular phase RMS/average/typical current.
188	1.11.4.1.5.(index)	jema2UpsUnitInputTruePower	NonNegativeInteger	read-only	Watts	The magnitude of the present input true power.

No.	Index	NAME	SYNTAX	MAX-ACCESS	Unit	Description
189	1.11.4.1.6.(index)	jema2UpsUnitInputPhase	INTEGER { unknown(1), singlePhase2Wire(2), singlePhase3Wire(3), threePhase3Wire(4), threePhase4Wire(5) }	read-only	—	The number of output phase. unknown(1) : unknown singlePhase2Wire(2): single phase 2 wire system jema2UpsUnitInputVoltage1; This value indicates the voltage between L-N. jema2UpsUnitInputCurrent1; This value indicate the current of L. singlePhase3Wire(3): single phase 3 wire jema2UpsUnitInputVoltage1, 2, 3; These value indicates the voltages between L1-N, L2-N, L1-L2. jema2UpsUnitInputCurrent1, 2; These value indicate the currents of L1, L2. threePhase3Wire(4): three phase 3 wire system jema2UpsUnitInputVoltage1, 2, 3; These value indicates the voltages between L1-L2, L2-L3, L3-L1. jema2UpsUnitInputCurrent1, 2, 3; These value indicate the currents of L1, L2, L3. threePhase4Wire(5) three phase 4 wire system jema2UpsUnitInputVoltage1, 2, 3, 4, 5, 6; These value indicate the voltages between L1-L2, L2-L3, L3-L1, L1-N, L2-N, L3-N. jema2UpsUnitInputCurrent1, 2, 3, 4; These value indicate the currents of L1, L2, L3, N.
190	1.11.4.1.7.(index)	jema2UpsUnitInputVoltage1	INTEGER32	read-only	0.1 RMS Volts	This value indicates the input voltage defined by jema2UpsUnitInputPhase. The value -1 means unknown.
191	1.11.4.1.8.(index)	jema2UpsUnitInputVoltage2	INTEGER32	read-only	0.1 RMS Volts	This value indicates the input voltage defined by jema2UpsUnitInputPhase. The value -1 means unknown.
192	1.11.4.1.9.(index)	jema2UpsUnitInputVoltage3	INTEGER32	read-only	0.1 RMS Volts	This value indicates the input voltage defined by jema2UpsUnitInputPhase. The value -1 means unknown.
193	1.11.4.1.10.(index)	jema2UpsUnitInputVoltage4	INTEGER32	read-only	0.1 RMS Volts	This value indicates the input voltage defined by jema2UpsUnitInputPhase. The value -1 means unknown.
194	1.11.4.1.11.(index)	jema2UpsUnitInputVoltage5	INTEGER32	read-only	0.1 RMS Volts	This value indicates the input voltage defined by jema2UpsUnitInputPhase. The value -1 means unknown.
195	1.11.4.1.12.(index)	jema2UpsUnitInputVoltage6	INTEGER32	read-only	0.1 RMS Volts	This value indicates the input voltage defined by jema2UpsUnitInputPhase. The value -1 means unknown.
196	1.11.4.1.13.(index)	jema2UpsUnitInputCurrent1	INTEGER32	read-only	0.1 RMS Amp	This value indicates the input current defined by jema2UpsUnitInputPhase. The value -1 means unknown.
197	1.11.4.1.14.(index)	jema2UpsUnitInputCurrent2	INTEGER32	read-only	0.1 RMS Amp	This value indicates the input current defined by jema2UpsUnitInputPhase. The value -1 means unknown.
198	1.11.4.1.15.(index)	jema2UpsUnitInputCurrent3	INTEGER32	read-only	0.1 RMS Amp	This value indicates the input current defined by jema2UpsUnitInputPhase. The value -1 means unknown.
199	1.11.4.1.16.(index)	jema2UpsUnitInputCurrent4	INTEGER32	read-only	0.1 RMS Amp	This value indicates the input current defined by jema2UpsUnitInputPhase. The value -1 means unknown.
200	1.11.5	jema2UpsUnitOutputTable	SEQUENCE OF Jema2UpsUnitOutputEntry	not-accessible	—	A list of unit output table entries. The number of entries is given by the value of jema2UpsNumUnits.
201	1.11.5.1	jema2UpsUnitOutputEntry	Jema2UpsUnitOutputEntry	not-accessible	—	An entry containing information applicable to a particular unit.
202	1.11.5.1.1.(index)	jema2UpsUnitOutputIndex	PositiveInteger	not-accessible	—	The UPS unit output identifier.

No.	Index	NAME	SYNTAX	MAX-ACCESS	Unit	Description
203	1.11.5.1.2.(index)	jema2UpsUnitOutputSource	INTEGER { other(1), none(2), normal(3), bypass(4), battery(5), booster(6), reducer(7) on-line(8) }	read-only	—	Status of power supply for output Source of output power other(1) : except below items none(2) : no output There is no source of output power (and therefore no output power), for example, the system has opened the output breaker. normal(3) : normal running There is normal output when input is normal. In standby UPS, during this normal status, power is supplied from the grid and AVR function is not operating. bypass(4) : output with bypass There is bypass output when input is normal. battery(5): running on battery There is on-battery operation. booster(6): running on booster here is boosted output voltage when input voltage is low. reducer(7): running on reducer There is reduced output voltage when input voltage is high. on-line(8): In online UPS, the inverter is operating using power from the grid.
204	1.11.5.1.3.(index)	jema2UpsUnitOutputFrequency	NonNegativeInteger	read-only	0.1 Hertz	The present output frequency.
205	1.11.5.1.4.(index)	jema2UpsUnitOutputVoltage	NonNegativeInteger	read-only	0.1 RMS Volts	The magnitude of the present output voltage. If output is singlePhase2Wire at jema2UpsUnitOutputPhase, the voltage indicates the effective (RMS) voltage. If not, it defined by manufacturer, for example, particular phase RMS/average/typical voltage.
206	1.11.5.1.5.(index)	jema2UpsUnitOutputCurrent	NonNegativeInteger	read-only	0.1 RMS Amp	The magnitude of the present output current. If output is singlePhase2Wire at jema2UpsUnitOutputPhase, the value indicates the effective (RMS) current. If not, it defined by manufacturer, for example, particular phase RMS/average/typical current.
207	1.11.5.1.6.(index)	jema2UpsUnitOutputPower	NonNegativeInteger	read-only	Watts	The magnitude of the present output true power.
208	1.11.5.1.7.(index)	jema2UpsUnitOutputPercentLoad	INTEGER(0..200)	read-only	percent	The output load factor (the percentage of the unit power capacity presently being used on this output line)
209	1.11.5.1.8.(index)	jema2UpsUnitOutputStatus	INTEGER { unknown(1), none(2), normal(3), }	read-only	—	The state of output lines utilized in this device. unknown(1): unknown state none(2): no output There is no output power in the line. normal(3): during feeding There is normal output in the line.

No.	Index	NAME	SYNTAX	MAX-ACCESS	Unit	Description
210	1.11.5.1.9.(index)	jema2UpsUnitOutputPhase	INTEGER { unknown(1), singlePhase2Wire(2), singlePhase3Wire(3), threePhase3Wire(4), threePhase4Wire(5) }	read-only	—	<p>The number of output phase. unknown(1) : unknown</p> <p>singlePhase2Wire(2): single phase 2 wire system jema2UpsUnitOutputVoltage1; This value indicates the voltage between L-N. jema2UpsUnitOutputCurrent1; This value indicate the current of L. jema2UpsUnitOutputPercentLoad1; This value indicate the percent load.</p> <p>singlePhase3Wire(3): single phase 3 wire jema2UpsUnitOutputVoltage1, 2, 3; These value indicates the voltages between L1-N, L2-N, L1-L2. jema2UpsUnitOutputCurrent1, 2; These value indicate the currents of L1, L2. jema2UpsUnitOutputPercentLoad1, 2, 3; These value indicates the percent load of L1-N, L2-N, L1-L2.</p> <p>threePhase3Wire(4): three phase 3 wire system jema2UpsUnitBypassVoltage1, 2, 3; These values indicate the voltages between L1-L2, L2-L3, L3-L1. jema2UpsUnitBypassCurrent1, 2, 3; These values indicate the currents of L1, L2, L3. jema2UpsUnitBypassPercentLoad1, 2, 3; These values indicate the percent load of L1, L2, L3.</p> <p>threePhase4Wire(5) three phase 4 wire system jema2UpsUnitBypassVoltage1, 2, 3, 4, 5, 6; These values indicate the voltages between L1-L2, L2-L3, L3-L1, L1-N, L2-N, L3-N. jema2UpsUnitBypassCurrent1, 2, 3, 4; These values indicate the currents of L1, L2, L3, N. jema2UpsUnitBypassPercentLoad1, 2, 3; These values indicate the percent load of L1, L2, L3.</p> <p>noBypass(6)</p>
211	1.11.5.1.10.(index)	jema2UpsUnitOutputVoltage1	INTEGER32	read-only	0.1 RMS Volts	This value indicates the output voltage defined by jema2UpsUnitOutputPhase. The value -1 means unknown.
212	1.11.5.1.11.(index)	jema2UpsUnitOutputVoltage2	INTEGER32	read-only	0.1 RMS Volts	This value indicates the output voltage defined by jema2UpsUnitOutputPhase. The value -1 means unknown.
213	1.11.5.1.12.(index)	jema2UpsUnitOutputVoltage3	INTEGER32	read-only	0.1 RMS Volts	This value indicates the output voltage defined by jema2UpsUnitOutputPhase. The value -1 means unknown.
214	1.11.5.1.13.(index)	jema2UpsUnitOutputVoltage4	INTEGER32	read-only	0.1 RMS Volts	This value indicates the output voltage defined by jema2UpsUnitOutputPhase. The value -1 means unknown.
215	1.11.5.1.14.(index)	jema2UpsUnitOutputVoltage5	INTEGER32	read-only	0.1 RMS Volts	This value indicates the output voltage defined by jema2UpsUnitOutputPhase. The value -1 means unknown.
216	1.11.5.1.15.(index)	jema2UpsUnitOutputVoltage6	INTEGER32	read-only	0.1 RMS Volts	This value indicates the output voltage defined by jema2UpsUnitOutputPhase. The value -1 means unknown.
217	1.11.5.1.16.(index)	jema2UpsUnitOutputCurrent1	INTEGER32	read-only	0.1 RMS Amp	This value indicates the output current defined by jema2UpsUnitOutputPhase. The value -1 means unknown.
218	1.11.5.1.17.(index)	jema2UpsUnitOutputCurrent2	INTEGER32	read-only	0.1 RMS Amp	This value indicates the output current defined by jema2UpsUnitOutputPhase. The value -1 means unknown.
219	1.11.5.1.18.(index)	jema2UpsUnitOutputCurrent3	INTEGER32	read-only	0.1 RMS Amp	This value indicates the output current defined by jema2UpsUnitOutputPhase. The value -1 means unknown.

No.	Index	NAME	SYNTAX	MAX-ACCESS	Unit	Description
220	1.11.5.1.19.(index)	jema2UpsUnitOutputCurrent4	INTEGER32	read-only	0.1 RMS Amp	This value indicates the output current defined by jema2UpsUnitOutputPhase. The value -1 means unknown.
221	1.11.5.1.20.(index)	jema2UpsUnitOutputPercentLoad1	INTEGER(-1..200)	read-only	percent	This value indicates the present load defined by jema2UpsUnitOutputPhase. The value -1 means unknown.
222	1.11.5.1.21.(index)	jema2UpsUnitOutputPercentLoad2	INTEGER(-1..200)	read-only	percent	This value indicates the present load defined by jema2UpsUnitOutputPhase. The value -1 means unknown.
223	1.11.5.1.22.(index)	jema2UpsUnitOutputPercentLoad3	INTEGER(-1..200)	read-only	percent	This value indicates the present load defined by jema2UpsUnitOutputPhase. The value -1 means unknown.
224	1.11.6	jema2UpsUnitBypassTable	SEQUENCE OF Jema2UpsUnitBypassEntry	not-accessible	—	A list of unit's output table entries. The number of entries is given by the value of jema2UpsNumUnits.
225	1.11.6.1	jema2UpsUnitBypassEntry	Jema2UpsUnitBypassEntry	not-accessible	—	An entry containing information applicable to a particular unit.
226	1.11.6.1.1.(index)	jema2UpsUnitBypassIndex	PositiveInteger	not-accessible		The UPS unit bypass identifier.
227	1.11.6.1.2.(index)	jema2UpsUnitBypassFrequency	NonNegativeInteger	read-only	0.1 Hertz	Bypass frequency
228	1.11.6.1.3.(index)	jema2UpsUnitBypassVoltage	NonNegativeInteger	read-only	0.1 RMS Volts	The magnitude of the present bypass voltage. If bypass is singlePhase2Wire at jema2UpsUnitBypassPhase, the voltage indicates the effective (RMS) voltage. If not, it defined by manufacturer, for example, particular phase RMS/average/typical voltage.
229	1.11.6.1.4.(index)	jema2UpsUnitBypassCurrent	NonNegativeInteger	read-only	0.1 RMS Amp	The magnitude of the present bypass current. If bypass is singlePhase2Wire at jema2UpsUnitBypassPhase, the value indicates the effective (RMS) current. If not, it defined by manufacturer, for example, particular phase RMS/average/typical current.
230	1.11.6.1.5.(index)	jema2UpsUnitBypassPower	NonNegativeInteger	read-only	Watts	The magnitude of the present bypass true power.

No.	Index	NAME	SYNTAX	MAX-ACCESS	Unit	Description
231	1.11.6.1.6.(index)	jema2UpsUnitBypassPhase	INTEGER { unknown(1), singlePhase2Wire(2), singlePhase3Wire(3), threePhase3Wire(4), threePhase4Wire(5), noBypass(6) }	read-only	—	<p>The number of bypass phase. unknown(1) : unknown</p> <p>singlePhase2Wire(2): single phase 2 wire system jema2UpsUnitBypassVoltage1; This value indicates the voltage between L-N. jema2UpsUnitBypassCurrent1; This value indicates the current of L. jema2UpsUnitBypassPercentLoad1; This value indicates the percent load1.</p> <p>singlePhase3Wire(3): single phase 3 wire jema2UpsUnitBypassVoltage1, 2, 3; These values indicate the voltages between L1-N, L2-N, L1-L2. jema2UpsUnitBypassCurrent1, 2; These value indicate the currents of L1, L2. jema2UpsUnitBypassPercentLoad1, 2, 3; These values indicate the percent load of L1-N, L2-N, L1-L2.</p> <p>threePhase3Wire(4): three phase 3 wire system jema2UpsUnitBypassVoltage1, 2, 3; These values indicate the voltages between L1-L2, L2-L3, L3-L1. jema2UpsUnitBypassCurrent1, 2, 3; These values indicate the currents of L1, L2, L3. jema2UpsUnitBypassPercentLoad1, 2, 3; These values indicate the percent load of L1, L2, L3.</p> <p>threePhase4Wire(5) three phase 4 wire system jema2UpsUnitBypassVoltage1, 2, 3, 4, 5, 6; These values indicate the voltages between L1-L2, L2-L3, L3-L1, L1-N, L2-N, L3-N. jema2UpsUnitBypassCurrent1, 2, 3, 4; These values indicate the currents of L1, L2, L3, N. jema2UpsUnitBypassPercentLoad1, 2, 3; These values indicate the percent load of L1, L2, L3.</p> <p>noBypass(6)</p>
232	1.11.6.1.7.(index)	jema2UpsUnitBypassVoltage1	INTEGER32	read-only	0.1 RMS Volts	This value indicates the bypass voltage defined by jema2UpsUnitBypassPhase. The value -1 means unknown.
233	1.11.6.1.8.(index)	jema2UpsUnitBypassVoltage2	INTEGER32	read-only	0.1 RMS Volts	This value indicates the bypass voltage defined by jema2UpsUnitBypassPhase. The value -1 means unknown.
234	1.11.6.1.9.(index)	jema2UpsUnitBypassVoltage3	INTEGER32	read-only	0.1 RMS Volts	This value indicates the bypass voltage defined by jema2UpsUnitBypassPhase. The value -1 means unknown.
235	1.11.6.1.10.(index)	jema2UpsUnitBypassVoltage4	INTEGER32	read-only	0.1 RMS Volts	This value indicates the bypass voltage defined by jema2UpsUnitBypassPhase. The value -1 means unknown.
236	1.11.6.1.11.(index)	jema2UpsUnitBypassVoltage5	INTEGER32	read-only	0.1 RMS Volts	This value indicates the bypass voltage defined by jema2UpsUnitBypassPhase. The value -1 means unknown.
237	1.11.6.1.12.(index)	jema2UpsUnitBypassVoltage6	INTEGER32	read-only	0.1 RMS Volts	This value indicates the bypass voltage defined by jema2UpsUnitBypassPhase. The value -1 means unknown.
238	1.11.6.1.13.(index)	jema2UpsUnitBypassCurrent1	INTEGER32	read-only	0.1 RMS Amp	This value indicates the bypass current defined by jema2UpsUnitBypassPhase. The value -1 means unknown.
239	1.11.6.1.14.(index)	jema2UpsUnitBypassCurrent2	INTEGER32	read-only	0.1 RMS Amp	This value indicates the bypass current defined by jema2UpsUnitBypassPhase. The value -1 means unknown.
240	1.11.6.1.15.(index)	jema2UpsUnitBypassCurrent3	INTEGER32	read-only	0.1 RMS Amp	This value indicates the bypass current defined by jema2UpsUnitBypassPhase. The value -1 means unknown.

No.	Index	NAME	SYNTAX	MAX-ACCESS	Unit	Description
241	1.11.6.1.16.(index)	jema2UpsUnitBypassCurrent4	INTEGER32	read-only	0.1 RMS Amp	This value indicates the bypass current defined by jema2UpsUnitBypassPhase. The value -1 means unknown.
242	1.11.7	jema2UpsUnitAlarmTable	SEQUENCE OF Jema2UpsUnitAlarmEntry	not-accessible	—	A list of unit's alarm table entries. The number of entries is given by the value of jema2UpsNumUnits.
243	1.11.7.1	jema2UpsUnitAlarmEntry	Jema2UpsUnitAlarmEntry	not-accessible	—	An entry containing information applicable to a particular unit.
244	1.11.7.1.1.(index)	jema2UpsUnitAlarmIndex	PositiveInteger	not-accessible	—	The Alarm identifier.
245	1.11.7.1.2.(index)	jema2UpsUnitAlarmFatalFaultStatus	INTEGER(-1..2147483648)	read-only	—	The fatal fault in the unit has been detected. Under this status, backup operation is not possible. When a power outage occurs, output is disconnected, thus urgent action is required. Detailed information is obtained by referring to jema2 Ups Unit Alarm Fatal Fault Detail. -1: Fatal fault none 1: Abnormal output 2: Main circuit failure 3: Fuse blown 4: Fan fault 5: Abnormal control 6: Abnormal battery 7-999: Reservation 1000- : Others (The content is defined by manufacturers.)
246	1.11.7.1.3.(index)	jema2UpsUnitAlarmFatalFaultDetail	DisplayString(SIZE(0..511))	read-only	—	Detailed information of fatal fault Detailed information on jema2UpsUnitAlarmFatalFaultStatus is given by the character string. The content of detailed information is defined by manufacturers. e.g. An example when abnormal output and main circuit failure occur is shown below. [Abnormal Output]Output voltage was over 115V for more than 5 seconds or under 85V instantaneously. [Main circuit failure]Failure suh as short circuit exists in a DC current *Multiple items can be described in Detail.
247	1.11.7.1.4.(index)	jema2UpsUnitAlarmFaultStatus	INTEGER(-1..2147483648)	read-only	—	The fault in the unit has been detected. A fault status where backup is possible is shown in the unit. Since the output can be maintained, there is a margin to deal with to some extent. The degree of urgency is low. Detailed information is obtained by referring to jema2UpsAlarmFaultDetail. -1: Fault none 1: Abnormal input 2: Abnormal bypass 3: Abnormal battery 4-999: Reservation 1000-: Others(The content is defined by manufacturers.)
248	1.11.7.1.5.(index)	jema2UpsUnitAlarmFaultDetail	DisplayString(SIZE(0..511))	read-only	—	Detailed information on jema2UpsUnitAlarmFaultStatus is given by the character string. The content of detailed information is defined by manufacturers. e.g. [Abnormal bypass]Bypass fuse was opened. *Multiple fault status can also be displayed in the same way as fatal fault.
249	1.11.7.1.6.(index)	jema2UpsUnitAlarmWarningStatus	INTEGER { none(-1), occurred(1) }	read-only	—	The warning in the unit has been detected. This is notified when an error other than fault occurs. This is not an issue of unit itself, but an environmental issue including power outage. Detailed information is obtained by referring to jema2UpsUnitAlarmWarningDetail. none(-1), occurred(1)

No.	Index	NAME	SYNTAX	MAX-ACCESS	Unit	Description
250	1.11.7.1.7.(index)	jema2UpsUnitAlarmWarningDetail	DisplayString(SIZE(0..511))	read-only	—	Detailed information of warning Detailed information on jema2UpsUnitAlarmWarningStatus is given by the character string. The content of detailed information is defined by manufacturers. e.g. [Overload]Load current exceeded 110%.
251	1.11.7.1.8.(index)	jema2UpsUnitAlarmCautionDetail	DisplayString(SIZE(0..511))	read-only	—	Caution detailed information from unit is given by the character string. Information that the manufacturer decided to need to notify such as change of unit setting, ON / OFF operation of output is notified. The content of detailed information is defined by manufacturers. e.g. [Battery low]Battery backup time was under 2 minutes
252	1.11.7.1.9.(index)	jema2UpsUnitAlarmInputBadStatus	INTEGER { none(-1), occurred(1) }	read-only	—	An abnormal condition of input in the unit has been detected. Detailed information is obtained by referring to jema2UpsUnitAlarmInputBadDetail. none(-1), occurred(1)
253	1.11.7.1.10.(index)	jema2UpsUnitAlarmInputBadDetail	DisplayString(SIZE(0..511))	read-only	—	Detailed information of abnormal input Detailed information on jema2UpsUnitAlarmInputBadStatus is given by the character string. The content of detailed information is defined by manufacturers. e.g. [Input Frequency Abnormal]Input frequency was under 47.5Hz or over 63Hz.
254	1.11.7.1.11.(index)	jema2UpsUnitAlarmOutputOverloadStatus	INTEGER { none(-1), occurred(1) }	read-only	—	The output overload in the unit has been detected. none(-1), occurred(1)
255	1.11.7.1.12.(index)	jema2UpsUnitAlarmBatteryBadStatus	INTEGER { none(-1), occurred(1) }	read-only	—	An abnormal condition of the battery in the unit has been detected. An error that battery replacement is required. In the following cases, it is considered as abnormal battery: 1. When jema2UpsUnitBatteryReplaceIndicator is 3. 2. When the other unit's self-diagnosis function judges that it is necessary to replace the battery. Detailed information is obtained by referring to jema2 Ups Unit Alarm Battery Bad Detail. none(-1), occurred(1)
256	1.11.7.1.13.(index)	jema2UpsUnitAlarmBatteryBadDetail	DisplayString(SIZE(0..511))	read-only	—	Detailed information of abnormal battery Detailed information on jema2UpsUnitAlarmBatteryBadStatus is given by the character string. The content of detailed information is defined by manufacturers. e.g. [Battery life end]Battery run time exceeded 5 years.
257	1.11.7.1.14.(index)	jema2UpsUnitAlarmTempBadStatus	INTEGER { none(-1), occurred(1) }	read-only	—	An abnormal temperature of the unit has been detected. This indicates the status of temperature inside the unit or of related position. Detailed information is obtained by referring to jema2 Ups Unit Alarm Temp Bad Detail. none(-1), occurred(1)
258	1.11.7.1.15.(index)	jema2UpsUnitAlarmTempBadDetail	DisplayString(SIZE(0..511))	read_only	—	Detailed information of abnormal temperature Detailed information on jema2UpsUnitAlarmTempBadStatus is given by the character string. The content of detailed information is defined by manufacturers. e.g. [Over-heated]Tmeparature is Fin temperature exceeded 100°C

No.	Index	NAME	SYNTAX	MAX-ACCESS	Unit	Description
259	1.11.8	jema2UpsUnitBitTable	SEQUENCE OF jema2UpsUnitBitEntry	not-accessible	—	A list of unit alarm table entries. The number of entries is indicated by jema2UpsNumUnits
260	1.11.8.1	jema2UpsUnitBitEntry	jema2UpsUnitBitEntry	not-accessible	—	A entry containing information applicable to a particular UPS unit AUGMENTS(jema2UpsUnitIdentEntry)
261	1.11.8.1.1.(index)	jema2UpsUnitBitIndex	PositiveInteger	not-accessible	—	The UPS unit Bit identifier.
262	1.11.8.1.2.(index)	jema2UpsUnitBitFatalFaultBit	OCTSTR(256)	read-only	—	Detailed unit fatal fault which occurs as bit strings. Each bit means will be determined by manufacturer. e.g. In case of No.1 and No.3 is occurred is occurred, ...0000000000000005
263	1.11.8.1.3.(index)	jema2UpsUnitBitFatalFaultDetail	DisplayString(SIZE(0..511))	read-only	—	Detailed information unit fatal fault which occurs as character strings. In case of multiple faults occurred at the same time, write them in bit sequence of jema2UpsBitFatalFault and separate them with comma. If character strings is more than 512 bytes, omit the following. e.g. In case of No.1 fatal fault (fan abnormal), No.3 fatal fault(DC overvoltage)is ocured, {Cooling fan abnormal,DC overvoltage}
264	1.11.8.1.4.(index)	jema2UpsUnitBitFault	OCTSTR(256)	read-only	—	Detailed unit fault which occurs as bits strings. Meaning of each bit is determined by manufacurer e.g. In case of No.1 and No.3 fault is occurred, ...0000000000000005
265	1.11.8.1.5.(index)	jema2UpsUnitBitFaultDetail	DisplayString(SIZE(0..511))	read-only	—	Detailed information unit fault which occurs as character strings. In case of multiple faults occurred, write them in bit sequence of jema2UpsBitFault and separate them with comma. If charactor strings is more than 512 bytes, omit the following. e.g. In case of No.1 fault(battery defect), No.3 Fatal fault(Backup Power supply defection) is ocured, {Cooling fan abnormal,DC overvoltage}
266	1.11.8.1.6.(index)	jema2UpsUnitBitWarning	OCTSTR(256)	read-only	—	Detaild unit warning which occurs as bit strings. Each bit means will be determined by manufacturer e.g. If No.1 and No.3 is occurred on warning, ...0000000000000005
267	1.11.8.1.7.(index)	jema2UpsUnitBitWarningDetail	DisplayString(SIZE(0..511))	read-only	—	Detaild information unit warning which occurs as character strings. In case of multiple warning occurred at the same time, write them in bit sequence of jema2UpsUnitBitWarning and separate them with comma. If character strings is more than 512 bytes, it will omitt the following. Detail information of contents and format is determined by manufacturer e.g. In case of No.1 warning (convertor overload), No.3 warning (commercial power supply abnormaln) is ocured, {Converter Overload,Input power failure}
268	1.11.8.1.8.(index)	jema2UpsUnitBitStatus	OCTSTR(256)	read-only	—	Detailed condition of UPS for each unit as bit strings. Each bit means will be determined by manufacturer e.g. Condition 1 ON, Condition 2 ON, Condition 3 ON, Condition 4 OFF, Condition 5 OFF, Condition 6 ON, ...0000000000000027
269	1.11.8.1.9.(index)	jema2UpsUnitBitStatusDetail	DisplayString(SIZE(0..511))	read-only	—	Detailed information condition of UPS for each unit as character strings. In case of multiple warning occurred at the same time, write them in bit sequence of jema2UpsUnitBitWarning and separate them with comma. e.g. Condition 1(Inverter Opration:ON) Condition 2(Load on Convertor:ON) Condition 3(Load on Invertor:ON) {Inverter Operation, ON,Converter Operation,ON, Load On inverter,ON,Load on bypass,OFF}

No.	Index	NAME	SYNTAX	MAX-ACCESS	Unit	Description
270	1.12	jema2UpsBms	—	—	—	—
271	1.12.1.0	jema2UpsBmsIdent	—	—	—	—
272	1.12.1.1.0	jema2UpsBmsIdentManufacturer	DisplayString(SIZE(0..31))	read-only	—	The manufacturer's name of Battery Management System("BMS")
273	1.12.1.2.0	jema2UpsBmsIdentModel	DisplayString(SIZE(0..63))	read-only	—	The BMS model name.
274	1.12.1.3.0	jema2UpsBmsIdentSoftwareVersion	DisplayString(SIZE(0..63))	read-only	—	The firmware/software version(s) in BMS.
275	1.12.1.4.0	jema2UpsBmsIdentManufacturedDate	DisplayString(SIZE(0..10))	read-only	yyyy-mm-dd	The date when the BMS was manufactured in yyyy-mm-dd format.
276	1.12.1.5.0	jema2UpsBmsIdentManufacturedNumber	DisplayString(SIZE(0..63))	read-only	—	The manufactured number of the BMS
277	1.12.2.0	jema2UpsBmsBit	—	—	—	—
278	1.12.2.1.0	jema2UpsBmsBitCurrentStatus	OCTSTR(256)	read-only	—	Current condition of BMS as bit strings. Each bit means will be determined by manufacturer. e.g. In case of Condition1(BMS status) ON, Condition2 (BMS trouble) OFF, Condition3(SOC status normal) ON, Condition4(SOH status normal) ON, Condition 5(Temperature up detecting) ON ...000000000000001D
279	1.12.2.2.0	jema2UpsBmsBitStatusDetail	DisplayString(SIZE(0..511))	read-only	—	Detailed information condition of BMS as character strings. In case of multiple faults occurred at the same time, write them in bit sequence of Jema2UpsBmsBitStatus and separate them with comma. Detail information of contents and format is determined by manufacturer. e.g. In case of Condition1(BMS status) ON, Condition2(BMS trouble) OFF, Condition3(SOC status normal) ON, Condition4(SOH status normal) ON, Condition 5(Temperature up detecting) ON {BMS status:ON,C BMS trouble:OFF, SOC status normal:ON, SOH status normal:OFF, Temp up detecting: ON }
280	1.12.3.0	jema2UpsBmsLastReplaceDate	DisplayString(SIZE(0..10))	read-write	yyyy-mm-dd	The date when the BMS was replaced in yyyy-mm-dd format.The initial value shows the date of manufacture of the BMS, date of installation, etc.
281	1.12.4.0	jema2UpsBmsSoc	INTEGER(-1..100)	read-only	percent	This value indicates the present of total SOC in BMS. The value -1 means unknown.
282	1.12.5.0	jema2UpsBmsSoh	INTEGER(-1..100)	read-only	percent	This value indicates the present of total SOH in BMS. The value -1 means unknown.
283	1.12.6.0	jema2UpsBmsVoltage	NonNegativeInteger	read-only	0.1 Volt DC	The magnitude of the present total voltage in BMS
284	1.12.7.0	jema2UpsBmsCurrent	Integer32	read-only	0.1 Amp DC	The representative value of current in BMS
285	1.12.8.0	jema2UpsBmsChargeCurrent	Integer32	read-only	0.1 Amp DC	The representative value of charge current in BMS
286	1.12.9.0	jema2UpsBmsDischargeCurrent	Integer32	read-only	0.1 Amp DC	The representative value of discharge current in BMS
287	1.12.10.0	jema2UpsBmsTemperature	Integer32	read-only	degrees Centigrade	The representative value of temperature in BMS.
288	1.12.11	jema2UpsBmsGroup	—	—	—	—
289	1.12.11.1.0	jema2UpsBmsNumGroups	NonNegativeInteger	read-only	—	The number of management groups utilized in the BMS. This variable indicates the entry number in the group table (jema2UpsBmsGroupTable).
290	1.12.11.2	jema2UpsBmsGroupTable	SEQUENCE OF Jema2UpsBmsGroupEntry	not-accessible	—	A list of management group table entries. The number of entries is given by the value of jema2UpsBmsNumGroups.
291	1.12.11.2.1	jema2UpsBmsGroupEntry	Jema2UpsBmsGroupEntry	not-accessible	—	An entry containing information applicable to a management group.
292	1.12.11.2.1.1.(Index)	jema2UpsBmsGroupIndex	PositiveInteger	not-accessible	—	No.(Index) of management group identifier
293	1.12.11.2.1.2	jema2UpsBmsGroupIdent	—	—	—	—
294	1.12.11.2.1.2.1.(Index)	jema2UpsBmsGroupIdentManufacturer	DisplayString(SIZE(0..31))	read-only	—	The manufacturer name of No.(Index) of group set in BMS
295	1.12.11.2.1.2.2.(Index)	jema2UpsBmsGroupIdentModel	DisplayString(SIZE(0..63))	read-only	—	The model name of No.(Index) of group set in BMS
296	1.12.11.2.1.2.3.(Index)	jema2UpsBmsGroupIdentSoftwareVersion	DisplayString(SIZE(0..63))	read-only	—	The firmware/software version(s) of No.(Index) of group set in BMS
297	1.12.11.2.1.2.4.(Index)	jema2UpsBmsGroupIdentManufacturedDate	DisplayString(SIZE(0..10))	read-only	yyyy-mm-dd	The date when the No.(Index) of group set in BMS was manufactured in yyyy-mm-dd format.
298	1.12.11.2.1.2.5.(Index)	jema2UpsBmsGroupIdentManufacturedNumber	DisplayString(SIZE(0..63))	read-only	—	The manufactured number of No.(Index) of group set in BMS
299	1.12.11.2.1.2.6.(Index)	jema2UpsBmsGroupIdentNumSubgroups	NonNegativeInteger	read-only	-	Number of sub-group set in No.(Index) of group set in the BMS

No.	Index	NAME	SYNTAX	MAX-ACCESS	Unit	Description
300	1.12.11.2.1.3	jema2UpsBmsGroupBit	—	—	—	—
301	1.12.11.2.1.3.1. (Index)	jema2UpsBmsGroupBitCurrentStatus	OCTSTR(256)	read-only	—	Current condition of No.(Index) of group set as bit strings. Each bit means will be determined by manufacturer. e.g. In case of Condition1(Group set status) ON, Condition2(Group set trouble) OFF, Condition3(SOC status normal) ON, Condition4(SOH status normal) ON, Condition5(Temperature up detecting) ON ...000000000000001D
302	1.12.11.2.1.3. 2.(Index)	jema2UpsBmsGroupBitStatusDetail	DisplayString(SIZE(0..511))	read-only	—	Detailed information condition of No.(Index) of group set in BMS as character strings. In case of multiple faults occurred at the same time, write them in bit sequence of Jema2UpsBmsGroupBitStatus and separate them with comma. Detail information of contents and format is determined by manufacturer. e.g. In case of Condition1(Group set status) ON, Condition2(Group set trouble) OFF, Condition3(SOC status normal) ON, Condition4(SOH status normal) ON, Condition5(Temperature up detecting) ON {Group set status:ON, Group set trouble:OFF, SOC status normal:ON, SOH status normal:OFF, Temp up detecting: ON }
303	1.12.11.2.1.4. (Index)	jema2UpsBmsGroupLastReplaceDate	DisplayString(SIZE(0..10))	read-write	yyyy-mm-dd	The date when No.(Index) of group set in BMS was replaced in yyyy-mm-dd format.The initial value shows the date of manufacture of the group set, date of installation, etc.
304	1.12.11.2.1.5. (Index)	jema2UpsBmsGroupSoc	INTEGER(-1..100)	read-only	percent	This value indicates the present of total SOC in No.(Index) of group set in BMS. The value -1 means unknown.
305	1.12.11.2.1.6. (Index)	jema2UpsBmsGroupSoh	INTEGER(-1..100)	read-only	percent	This value indicates the present of total SOH in No.(Index) of group set in BMS. The value -1 means unknown.
306	1.12.11.2.1.7. (Index)	jema2UpsBmsGroupVoltage	NonNegativeInteger	read-only	0.1 Volt DC	The magnitude of the present total voltage in No.(Index) of group set in BMS
307	1.12.11.2.1.8. (Index)	jema2UpsBmsGroupCurrent	Integer32	read-only	0.1 Amp DC	The representative value of current in No.(Index) of group set in BMS
308	1.12.11.2.1.9. (Index)	jema2UpsBmsGroupChargeCurrent	Integer32	read-only	0.1 Amp DC	The representative value of charge current in No.(Index) of group set in BMS
309	1.12.11.2.1.10. (Index)	jema2UpsBmsGroupDischargeCurrent	Integer32	read-only	0.1 Amp DC	The representative value of discharge current in No.(Index) of group set in BMS
310	1.12.11.2.1.11. (Index)	jema2UpsBmsGroupTemperature	Integer32	read-only	degrees Centigrade	The representative value of temperature in No.(Index) of group set in BMS
311	1.12.11.3	jema2UpsBmsGroupSub	—	—	—	—
312	1.12.11.3.1.0	jema2UpsBmsNumGroupSubs	NonNegativeInteger	read-only	—	The number of management sub-groups utilized in the group of BMS. This variable indicates the entry number in the sub-group table (jema2UpsBmsGroupSubTable)
313	1.12.11.3.2	jema2UpsBmsGroupSubTable	SEQUENCE OF Jema2UpsBmsGroupSubEntry	not-accessible	—	A list of management sub-group in BMS table entries. The number of entries is given by the value of jema2UpsBmsNumGroupSubs
314	1.12.11.3.2.1	jema2UpsBmsGroupSubEntry	Jema2UpsBmsGroupSubEntry	not-accessible	—	An entry containing information applicable to a management sub group in BMS. AUGMENTS {jema2UpsBmsGroupEntry}
315	1.12.11.3.2.1.1.(Index)	jema2UpsBmsGroupSubIndex	PositiveInteger	not-accessible	—	No.(Index) of management sub-group in the group in BMS identifier
316	1.12.11.3.2.1.2.(Index)	jema2UpsBmsGroupSubIdent	—	—	—	—
317	1.12.11.3.2.1.2.1.(Index)	jema2UpsBmsGroupSubIdentManufacturer	DisplayString(SIZE(0..31))	read-only	—	The manufacturer's name of No.(Index) of sub-group set in BMS
318	1.12.11.3.2.1.2.2.(Index)	jema2UpsBmsGroupSubIdentModel	DisplayString(SIZE(0..63))	read-only	—	The model name of No.(Index) of sub-group set in BMS
319	1.12.11.3.2.1.2.3.(Index)	jema2UpsBmsGroupSubIdentSoftwareVersion	DisplayString(SIZE(0..63))	read-only	—	The firmware/software version(s) of No.(Index) of sub-group set in BMS
320	1.12.11.3.2.1.2.4.(Index)	jema2UpsBmsGroupSubIdentManufacturedDate	DisplayString(SIZE(0..10))	read-only	yyyy-mm-dd	The date when the No.(Index) of sub-group set in BMS was manufactured in yyyy-mm-dd format.

No.	Index	NAME	SYNTAX	MAX-ACCESS	Unit	Description
321	1.12.11.3.2.1.2.5. (Index)	jema2UpsBmsGroupSubIdentManufacturedNumber	DisplayString(SIZE(0..63))	read-only	—	The manufactured number of No.(Index) of sub-goup set in BMS
322	1.12.11.3.2.1.2.6. (Index)	jema2UpsBmsGroupSubIdentNumCells	NonNegativeInteger	read-only	-	Number of cell in No.(Index) of sub-group set in the BMS
323	1.12.11.3.2.1.3	jema2UpsBmsGroupSubBit	—	—	—	—
324	1.12.11.3.2.1.3.1. (Index)	jema2UpsBmsGroupSubBitCurrentStatus	OCTSTR(256)	read-only	—	Current condition of No.(Index) of sub-group set as bit strings. Each bit means will be determined by manufacturer. e.g. In case of Condition1(Sub-group set status) ON, Condition2 (Sub-group set trouble) OFF, Condition3(SOC status normal) ON, Condition4(SOH status normal) ON, Condition5(Temperature up detecting) ON ...000000000000001D
325	1.12.11.3.2.1.3.2. (Index)	jema2UpsBmsGroupSubBitCurrentStatusDetail	DisplayString(SIZE(0..511))	read-only	—	Detailed information condition of No.(Index) of sub-group set in BMS as charactor strings. In case of multiple fault occurred at the same time, write them in bit sequence of Jema2UpsBmsGroupSubBitStatus and separate them with comma. Detail information of contents and format is determined by manufacturer. e.g. In case of Condition1(Sub-group set status) ON, Condition2(Sub-group set trouble) OFF, Condition3(SOC status normal) ON, Condition4(SOH status normal) ON, Condition5(Temperature up detecting) ON {Sub-group set status:ON, Sub-group set trouble:OFF, SOC status normal:ON, SOH status normal:OFF, Temp up detecting: ON }
326	1.12.11.3.2.1.4. (Index)	jema2UpsBmsGroupSubLastReplaceDate	DisplayString(SIZE(0..10))	read-write	yyyy-mm-dd	The date when No.(Index) of sub-group set in BMS was replaced in yyyy-mm-dd format.The initial value shows the date of manufacture of the sub-group set, date of installation, etc.
327	1.12.11.3.2.1.5. (Index)	jema2UpsBmsGroupSubSoc	INTEGER(-1..100)	read-only	percent	This value indicates the present of total SOC in No.(Index) of sub-group set in BMS. The value -1 means unknown.
328	1.12.11.3.2.1.6. (Index)	jema2UpsBmsGroupSubSoh	INTEGER(-1..100)	read-only	percent	This value indicates the present of total SOH in No.(Index) of sub-group set in BMS. The value -1 means unknown.
329	1.12.11.3.2.1.7. (Index)	jema2UpsBmsGroupSubVoltage	NonNegativeInteger	read-only	0.1 Volt DC	The mganitude of the present total voltage in No.(Index) of sub-group set in BMS
330	1.12.11.3.2.1.8. (Index)	jema2UpsBmsGroupSubCurrent	Integer32	read-only	0.1 Amp DC	The representative value of current in No.(Index) of group set in BMS
331	1.12.11.3.2.1.9. (Index)	jema2UpsBmsGroupSubChargeCurrent	Integer32	read-only	0.1 Amp DC	The representative value of charge current in No.(Index) of sub-group set in BMS
332	1.12.11.3.2.1.10. (Index)	jema2UpsBmsGroupSubDischargeCurrent	Integer32	read-only	0.1 Amp DC	The representative value of discharge current in No.(Index) of sub-group set in BMS
333	1.12.11.3.2.1.11. (Index)	jema2UpsBmsGroupSubTemperature	Integer32	read-only	degrees Centigrade	The representative value of temperature in No.(Index) of sub-group set in BMS.
334	2	jema2UpsTraps	—	—	—	This section defines the general notifications sent by the UPS agents. Care must be taken to insure that no particular notification is sent to a single receiving entity more often than once every five seconds.
335	2.1	jema2UpsTrapOnBattery	—	—	—	The UPS is operating on battery power. This trap is persistent and is resent at one minute intervals until the UPS either turns off or is no longer running on battery.
336	2.2	jema2UpsTrapTestCompleted	—	—	—	This trap is sent upon completion of a UPS diagnostic test. The test result is obtained by referring to jema2UpsTestResultSummary.
337	2.3	jema2UpsTrapInputBad	—	—	—	An abnormal condition of input in the UPS has been detected.
338	2.4	jema2UpsTrapInputBadRemoved	—	—	—	The input in the UPS has returned from the abnormal condition.
339	2.5	jema2UpsTrapBatteryLow	—	—	—	The battery capacity is low. Refer to jemaUpsBatteryStatus. This trap is resent according to Jema2UpsConfigIntervalTrapTime.

No.	Index	NAME	SYNTAX	MAX-ACCESS	Unit	Description
340	2.6	jema2UpsTrapOutputOverload	—	—	—	An overload has been detected.
341	2.7	jema2UpsTrapOutputOverloadRemoved	—	—	—	The output in the UPS has returned from the overload.
342	2.8	jema2UpsTrapBatteryBad	—	—	—	An abnormal condition of the battery in the UPS has been detected.
343	2.9	jema2UpsTrapTempBad	—	—	—	An abnormal temperature of the UPS has been detected.
344	2.10	jema2UpsTrapTempBadRemoved	—	—	—	The temperature of the UPS has returned from the abnormal condition.
345	2.11	jema2UpsTrapCommunicationsLost	—	—	—	The communication between the UPS and agent has been lost.
346	2.12	jema2UpsTrapCommunicationsLostRemoved	—	—	—	The communication between the UPS and agent has been established.
347	2.13	jema2UpsTrapConfigChange	—	—	—	The UPS configuration has been changed.
348	2.14	jema2UpsTrapFatalFault	—	—	—	The fatal fault in the UPS has been detected. It depends upon manufacturer's judgment whether the Abnormal Battery Voltage is treated as fatal fault. Detailed information is obtained by referring to jemaUpsAlarmFaultDetail. 1: Abnormal input 2: Abnormal bypass 3: Abnormal battery 4-999: Reservation 1000- : Others(The content is defined by manufacturers.) A fault in the UPS has been detected. The UPS can backup. The abnormal input means an abnormal input phase rotation or an input earth fault.
349	2.15	jema2UpsTrapFault	—	—	—	A fault in the UPS has been detected. The UPS can backup. The abnormal input means an abnormal input phase rotation or an input earth fault. Detailed information is obtained by referring to jemaUpsAlarmFaultDetail. 1: Abnormal input 2: Abnormal bypass 3: Abnormal battery 4-999: Reservation 1000- : Others(The content is defined by manufacturers.) A fault in the UPS has been detected. The UPS can backup. The abnormal input means an abnormal input phase rotation or an input earth fault.
350	2.16	jema2UpsTrapFaultRemoved	—	—	—	The UPS has returned from a fault.
351	2.17	jema2UpsTrapWarning	—	—	—	The warning in the UPS has been detected. Notify when an abnormality other than failure occurs. The content of the warning is determined by the manufacturer. For detailed information on warning contents, It is obtained by referring to jema2UpsAlarmWarningDetail.
352	2.18	jema2UpsTrapWarningRemoved	—	—	—	The UPS has returned from a warning.
353	2.19	jema2UpsTrapCaution	—	—	—	The caution in the UPS has been detected. Notification of information that the manufacturer has determined to need to notify, such as change of state of UPS, ON / OFF of output, etc. Detailed information contents are obtained by referring to jema2UpsAlarmCautionDetail.

No.	Index	NAME	SYNTAX	MAX-ACCESS	Unit	Description
354	2.20	jema2UpsTrapAny	—	—	—	The trap factors exist. While any following Statuses indicate abnormal condition (except -1),the traps are sent according to jema2UpsConfigIntervalTrapControl and jema2UpsConfigIntervalTrapTime. jema2UpsAlarmFatalFaultStatus, jema2UpsAlarmFaultStatus jema2UpsAlarmWarningStatus, jema2UpsAlarmInputBadStatus jema2UpsAlarmOutputOverloadStatus, jema2UpsAlarmBatteryBadStatus jema2UpsAlarmTempBadStatus The first jemaUpsTrapAny is sent after jemaUpsConfigInterval TrapTime passed from detection of abnormal condition.
355	3	jema2UpsTrace	—	—	—	—
356	3.1.0	jema2UpsTraceNumBank	NonNegativeInteger	read-only	—	Number of bank entries in the waveform table(number of usable banks)
357	3.2	jema2UpsTraceBank	—	—	—	—
358	3.2.1	jema2UpsTraceBankTable	SEQUENCE OF Jema2UpsTraceBankEntry	not-accessible	—	A list of bank entries with waveform table.
359	3.2.1.1	jema2UpsTraceBankEntry	jema2UpsTraceBankEntry	not-accessible	—	A entry for provide on Waveform table about UPS data storage as know as "bank"
360	3.2.1.1.1.(Bank_index)	jema2UpsTraceBankIndex	PositiveInteger	not-accessible	—	Bank identification of waveform table
361	3.2.1.1.2.(Bank_index)	jema2UpsTraceBankCount	NonNegativeInteger	read-only	—	Number of banks for waveform data is completed to transfer from UPS.
362	3.2.1.1.3.(Bank_index)	jema2UpsTraceHeader	OCTSTR(256)	read-only	—	Information of transfer waveform Contents and format is determined by manufacturer.
363	3.2.1.1.4.(Bank_index)	jema2UpsTraceNumBlock	NonNegativeInteger	read-only	—	Number of blocks for waveform table about UPS data storage as know as "bank"
364	3.3	jema2UpsTraceBlock	—	—	—	—
365	3.3.1	jema2UpsTraceBlockTable	SEQUENCE OF jema2UpsTraceBlockEntry	not-accessible	—	A list of block entries corresponding to the waveform table "bank".
366	3.3.1.1	jema2UpsTraceBlockEntry	jema2UpsTraceBlockEntry	not-accessible	—	An entry that provides information on the block corresponding to the waveform table bank
367	3.3.1.1.1.(Bank_index).(Block_index)	jema2UpsTraceBlockIndex	PositiveInteger	not-accessible	—	—
368	3.3.1.1.2.(Bank_index).(Block_index)	jema2UpsTraceBlockData	OCTSTR(1024)	read-only	—	Waveform data indicates as UPS data storage as know as "bank"
369	3.4	jema2UpsSets	—	—	—	—
370	3.4.1.0	jema2UpsSetsStatus	INTEGER(-1..2147483648)	read-only	—	Storage SNMP agent condition into it. Contents and format is determined by manufacturer.
371	3.4.2.0	jema2UpsSetsTime	OCTSTR	read-write	2017-08-02T14:39:50+09:00	Setting time for UPS with ISO8601 extended format.
372	3.4.3	jema2UpsSetsTraceTable	SEQUENCE OF Jema2UpsSetsTraceEntry	not-accessible	—	A list of waveform acquisition request entries. The number of entries is given by the value of jema2UpsTraceNumBlock
373	3.4.3.1	jema2UpsSetsTraceEntry	Jema2UpsSetsTraceEntry	not-accessible	—	An entry waveform acquisition request.
374	3.4.3.1.1.(Bank_index)	jema2UpsSetsTraceIndex	PositiveInteger	read-only	—	Waveform identifier
375	3.4.3.1.2.(Bank_index)	jema2UpsSetsTracePercentage	NonNegativeInteger	read-only	%	It indicates as progressing percentage for waveform.
376	3.4.3.1.3.(Bank_index)	jema2UpsSetsTraceReset	NonNegativeInteger	read-write	—	Clear the waveform and a state where waveform acquisition is possible is set.
377	3.4.3.1.4.(Bank_index)	jema2UpsSetsTraceRequest	NonNegativeInteger	read-write	—	Requests the UPS to acquire the waveform.

Remark1. About the use of Interger and Interger32 in SYNTAX, if the value is going to be asined as Constant, it should be used as Interger and if it tobe done as Valiable, it be done as Interger32.

Remark2.

About the type of electric power distribution for input, output and baypass in each OID, it will be difined in each as follows.

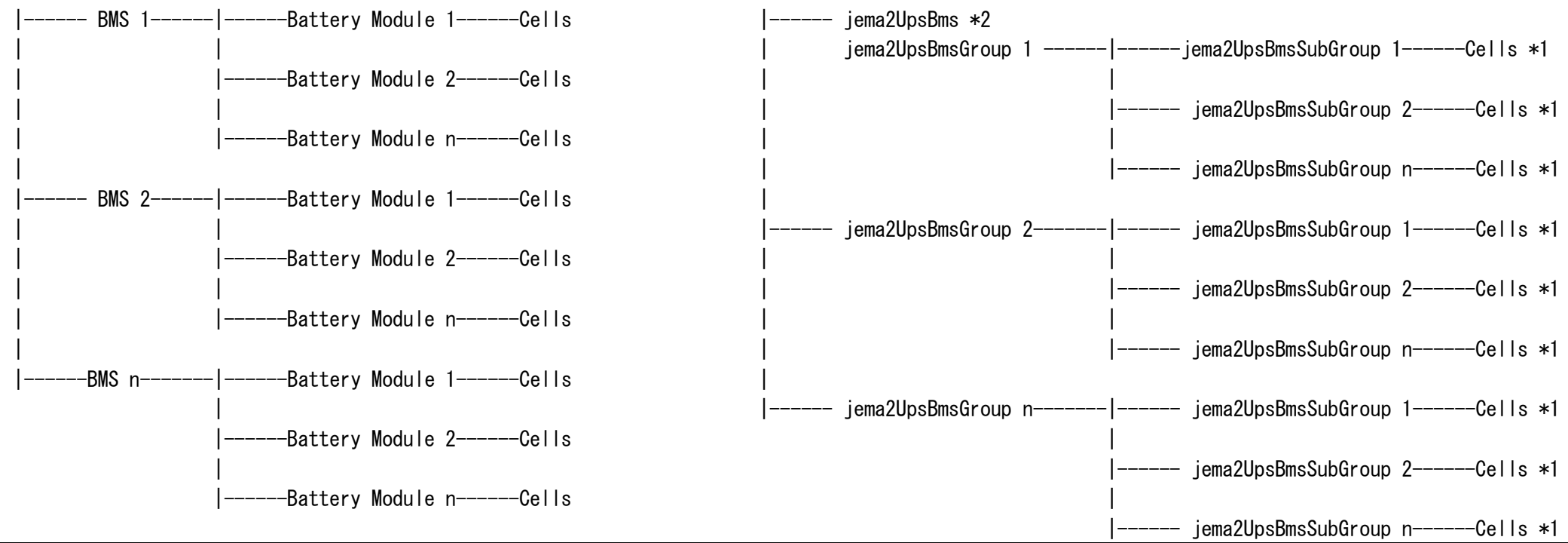
1.3.3.1.7 jema2UpsInputPhase 1.11.4.1.6.(index) jema2UpsUnitInputPhase	1.4.4.1.9 jema2UpsOutputPhase 1.11.5.1.9.(index) jema2UpsUnitOutputPhase	1.5.3.1.5 jema2UpsBypassPhase 1.11.6.1.6.(index) jema2UpsUnitBypassPhase
Single-phase 2-wire <div style="display: flex; justify-content: space-between; align-items: center;"> <div style="text-align: right;">L line -----</div> <div style="border-left: 1px solid black; padding-left: 5px;"> ----- UPS Input side ----- </div> </div> <div style="display: flex; justify-content: space-between; align-items: center; margin-top: 10px;"> <div style="text-align: right;">N line -----</div> <div style="border-left: 1px solid black; padding-left: 5px;"> ----- ----- </div> </div>	Single-phase 2-wire <div style="display: flex; justify-content: space-between; align-items: center;"> <div style="border-right: 1px solid black; padding-right: 5px;"> ----- UPS Output side ----- </div> <div style="text-align: left;"> ----- L line ----- ----- N line ----- </div> </div>	Single-phase 2-wire <div style="display: flex; justify-content: space-between; align-items: center;"> <div style="text-align: right;">L line -----</div> <div style="border-left: 1px solid black; padding-left: 5px;"> ----- UPS Input side ----- </div> </div> <div style="display: flex; justify-content: space-between; align-items: center; margin-top: 10px;"> <div style="text-align: right;">N line -----</div> <div style="border-left: 1px solid black; padding-left: 5px;"> ----- ----- </div> </div>
Single-phase three-wire (Grounding pole) <div style="display: flex; justify-content: space-between; align-items: center;"> <div style="text-align: right;">L1 line -----</div> <div style="border-left: 1px solid black; padding-left: 5px;"> ----- UPS Input side ----- </div> </div> <div style="display: flex; justify-content: space-between; align-items: center; margin-top: 10px;"> <div style="text-align: right;">N line -----</div> <div style="border-left: 1px solid black; padding-left: 5px;"> ----- ----- </div> </div> <div style="display: flex; justify-content: space-between; align-items: center; margin-top: 10px;"> <div style="text-align: right;">L2 line -----</div> <div style="border-left: 1px solid black; padding-left: 5px;"> ----- ----- </div> </div>	Single-phase three-wire (Neutral conductor) <div style="display: flex; justify-content: space-between; align-items: center;"> <div style="border-right: 1px solid black; padding-right: 5px;"> ----- UPS Output side ----- </div> <div style="text-align: left;"> ----- L1 line ----- ----- N line ----- ----- L2 line ----- </div> </div>	Single-phase three-wire <div style="display: flex; justify-content: space-between; align-items: center;"> <div style="text-align: right;">L1 line -----</div> <div style="border-left: 1px solid black; padding-left: 5px;"> ----- UPS Input side ----- </div> </div> <div style="display: flex; justify-content: space-between; align-items: center; margin-top: 10px;"> <div style="text-align: right;">N line -----</div> <div style="border-left: 1px solid black; padding-left: 5px;"> ----- ----- </div> </div> <div style="display: flex; justify-content: space-between; align-items: center; margin-top: 10px;"> <div style="text-align: right;">L2 line -----</div> <div style="border-left: 1px solid black; padding-left: 5px;"> ----- ----- </div> </div>
Three-phase three-wire <div style="display: flex; justify-content: space-between; align-items: center;"> <div style="text-align: right;">L1 line -----</div> <div style="border-left: 1px solid black; padding-left: 5px;"> ----- UPS Input side ----- </div> </div> <div style="display: flex; justify-content: space-between; align-items: center; margin-top: 10px;"> <div style="text-align: right;">L2 line -----</div> <div style="border-left: 1px solid black; padding-left: 5px;"> ----- ----- </div> </div> <div style="display: flex; justify-content: space-between; align-items: center; margin-top: 10px;"> <div style="text-align: right;">L3 line -----</div> <div style="border-left: 1px solid black; padding-left: 5px;"> ----- ----- </div> </div>	Three-phase three-wire <div style="display: flex; justify-content: space-between; align-items: center;"> <div style="border-right: 1px solid black; padding-right: 5px;"> ----- UPS Output side ----- </div> <div style="text-align: left;"> ----- L1 line ----- ----- L2 line ----- ----- L3 line ----- </div> </div>	Three-phase three-wire <div style="display: flex; justify-content: space-between; align-items: center;"> <div style="text-align: right;">L1 line -----</div> <div style="border-left: 1px solid black; padding-left: 5px;"> ----- UPS Input side ----- </div> </div> <div style="display: flex; justify-content: space-between; align-items: center; margin-top: 10px;"> <div style="text-align: right;">L2 line -----</div> <div style="border-left: 1px solid black; padding-left: 5px;"> ----- ----- </div> </div> <div style="display: flex; justify-content: space-between; align-items: center; margin-top: 10px;"> <div style="text-align: right;">L3 line -----</div> <div style="border-left: 1px solid black; padding-left: 5px;"> ----- ----- </div> </div>
Three-phase four-wire <div style="display: flex; justify-content: space-between; align-items: center;"> <div style="text-align: right;">L1 line -----</div> <div style="border-left: 1px solid black; padding-left: 5px;"> ----- UPS Input side ----- </div> </div> <div style="display: flex; justify-content: space-between; align-items: center; margin-top: 10px;"> <div style="text-align: right;">L2 line -----</div> <div style="border-left: 1px solid black; padding-left: 5px;"> ----- ----- </div> </div> <div style="display: flex; justify-content: space-between; align-items: center; margin-top: 10px;"> <div style="text-align: right;">L3 line -----</div> <div style="border-left: 1px solid black; padding-left: 5px;"> ----- ----- </div> </div> <div style="display: flex; justify-content: space-between; align-items: center; margin-top: 10px;"> <div style="text-align: right;">N Line -----</div> <div style="border-left: 1px solid black; padding-left: 5px;"> ----- ----- </div> </div>	Three-phase four-wire <div style="display: flex; justify-content: space-between; align-items: center;"> <div style="border-right: 1px solid black; padding-right: 5px;"> ----- UPS Output side ----- </div> <div style="text-align: left;"> ----- L1 line ----- ----- L2 line ----- ----- L3 line ----- ----- N line ----- </div> </div>	Three-phase four-wire <div style="display: flex; justify-content: space-between; align-items: center;"> <div style="text-align: right;">L1 line -----</div> <div style="border-left: 1px solid black; padding-left: 5px;"> ----- UPS Input side ----- </div> </div> <div style="display: flex; justify-content: space-between; align-items: center; margin-top: 10px;"> <div style="text-align: right;">L2 line -----</div> <div style="border-left: 1px solid black; padding-left: 5px;"> ----- ----- </div> </div> <div style="display: flex; justify-content: space-between; align-items: center; margin-top: 10px;"> <div style="text-align: right;">L3 line -----</div> <div style="border-left: 1px solid black; padding-left: 5px;"> ----- ----- </div> </div> <div style="display: flex; justify-content: space-between; align-items: center; margin-top: 10px;"> <div style="text-align: right;">N Line -----</div> <div style="border-left: 1px solid black; padding-left: 5px;"> ----- ----- </div> </div>

Remark3

The following of Battery Management System types are supported.

	BMS構成 Bms chart	オブジェクト構成 Object chart
e.g.1	<pre> BMS----- -----Battery Module 1-----Cells -----Battery Module 2-----Cells -----Battery Module n-----Cells </pre>	<pre> jema2UpsBms----- ----- jema2UpsBmsGroup 1-----Cells *1 ----- jema2UpsBmsGroup 2-----Cells *1 ----- jema2UpsBmsGroup n-----Cells *1 </pre>
e.g.2	<pre> BMS----- -----Sub BMS 1----- -----Battery Module 1----- Cells -----Battery Module 2----- Cells -----Battery Module n----- Cells -----Sub BMS 2----- -----Battery Module 1-----Cells -----Battery Module 2----- Cells -----Battery Module n----- Cells -----Sub BMS n----- -----Battery Module 1-----Cells -----Battery Module 2----- Cells -----Battery Module n----- </pre>	<pre> jema2UpsBms ----- ----- jema2UpsBmsGroup 1----- ----- jema2UpsBmsSubGroup 1-----Cells *1 ----- jema2UpsBmsSubGroup 2-----Cells *1 ----- jema2UpsBmsSubGroup n-----Cells *1 ----- jema2UpsBmsGroup 2----- ----- jema2UpsBmsSubGroup 1-----Cells *1 ----- jema2UpsBmsSubGroup 2-----Cells *1 ----- jema2UpsBmsSubGroup n-----Cells *1 ----- jema2UpsBmsGroup n----- ----- jema2UpsBmsSubGroup 1-----Cells *1 ----- jema2UpsBmsSubGroup 2-----Cells *1 ----- jema2UpsBmsSubGroup n-----Cells *1 </pre>

e.g.3



*1: Each value of battery cell is not supported in JEMA MIB

*2: Value of each object in jema2UpsBms is same one in jema2UpsBmsGroup 1.