added	register	group	mnemonic	name	datatype	bytes	repeats	size	extension	access	readable by	writable by	write access	**reboot**	description
	100	identification	**idspdm**	SPDMVersion	int	2	1	2		ro	ALL	-	-		Data model version
	102	identification	**idfwvs**	firmwareVersion	int	2	1	2		ro	ALL	-	-		Firmware version number.
	104	identification	**idonbr**	salesOrderNumber	ascii	16	1	16		rw	ALL	DATABUS, IPAPI, WEBAPI	super		SP sales order number.
	120	identification	**idpart**	productId	ascii	16	1	16		rw	ALL	DATABUS, IPAPI, WEBAPI	super		SP product id.
	136	identification	**idsnbr**	serialNumber	ascii	16	1	16		rw	ALL	DATABUS, IPAPI, WEBAPI	super		SP serial number.
	152	identification	**idchip**	hardwareAddress	int	2	3	6		ro	ALL	-	-		Hardware serial number; cannot be changed. Can be used as backup unit address. Formatted as a 3-tuple of unsigned 16 bit integers separated by dashes: "int - int - int"
	158	identification	**idaddr**	unitAddress	int	2	1	2		rw	ALL	ALL	admin		User defined address; this will be used for addressing the unit.
124	160	identification	**idfwbd**	buildNumber	ascii	12	1	12		ro	ALL	-	-		Firmware build number; date of last release.
126	172	identification	**idmaca**	macAddress	int	6	1	6		rw	ALL	DATABUS, IPAPI, WEBAPI	super		MAC address as 6-tuple of bytes.
130	178	identification	**idspdt**	deviceType	int	1	1	1		ro	ALL	DATABUS, IPAPI, WEBAPI	super		Device category: 0 = PDU 1 = DPM 2 = hPDU_G3 (met USB) 3 = DPM27
264	180	identification	**idctyp**	configType	int	1	1	1		ro	ALL	-			Readonly register for the wire configuration type as defined for the PDU.
	200	configuration	**cfnrph**	nrPhases	int	1	1	1		rw	ALL	DATABUS, IPAPI, WEBAPI	super		Either zero, one or three for no input metering, single or three phase system
	201	configuration	**cfnrno**	nrOutletsTotal	int	1	1	1		rw	ALL	DATABUS, IPAPI, WEBAPI	super		Total number of outlets, even hardwired ones without a switch/measure modules.
	202	configuration	**cfnrso**	nrSwitchedOutl	int	1	1	1		rw	ALL	DATABUS, IPAPI, WEBAPI	super		Number of switched outlets. If numbering of outlets used is non-contiguous: the highest outlet number is assumed as amount of switched outlets.
	203	configuration	**cfnrmo**	nrOutletsMeasurement	int	1	1	1		rw	ALL	DATABUS, IPAPI, WEBAPI	super		Number of measured outlets. If numbering of outlets used is non-contiguous: the highest outlet number is assumed as amount of measured outlets.
	204	configuration	**cfamps**	maximumLoad	int	1	1	1		rw	ALL	DATABUS, IPAPI, WEBAPI	super		Maximum rated load of device per phase, usually either 16A, 32A or 64A.
	205	configuration	**cfnrte**	nrTempSensors	int	1	1	1		rw	DATABUS, IPAPI, WEBAPI, MODBUS	DATABUS, IPAPI, WEBAPI	super		Number of temperature sensors present in the system.
	206	configuration	**cfnres**	nrSensors	int	1	1	1		ro	ALL	-	-		Returns the number of detected environmental sensors on the sensor port.
252	220	configuration	**cfusbm**	USB	int	1	1	1		rw	ALL	DATABUS, IPAPI, WEBAPI, MODBUS, SNMP	admin		0 = USB disabled, 1 = Only firmware update
	300	system_status	**ssstat**	deviceStatusCode	int	1	1			ro	ALL	-	-		Returns internal device status. 0 = OK 1 = alert flagged 16 = watchdog timer caused reset 32 = brownout detected 128 = slave module was reset
	301	system_status	**ssttri**	temperatureAlert	int	1	1	1		ro	ALL	-	-		Alert status on whether temperature exceeded configured threshold and on which sensor it exceeded. 0 = no alert 1 = internal unit temperature 2 = external sensor
	302	system_status	**ssitri**	inputCurrentAlert	int	1	1	1		ro	ALL	-	-		Alert status on whether input current load exceeded threshold and which input phase it affected. 0 = no alert 1-3 input phase
	303	system_status	**ssotri**	outputCurrentAlert	int	1	1	1		ro	ALL	-	-		Alert status on whether output current exceeded threshold. 0 = no alert 1-54 = outlet number

added	register	group	mnemonic	name	datatype	bytes	repeats	size	extension	access	readable by	writable by	write access	**reboot**	description
	304	system_status	**ssvtri**	inputVoltageAlert	int	1	1	1		ro	ALL	-	-		Alert status on whether a voltage drop occurred on the input. 0 = no alert 1-3 input phase
	305	system_status	**ssftri**	oCurrentDropAlert	int	1	1	1		ro	ALL	-	-		Alert status on whether output current exceeded threshold. 0 = no alert 1-54 = outlet number
	306	system_status	**ssicda**	iCurrentDropAlert	int	1	1	1		ro	ALL	-	-		Alert status on whether current a current drop occured (to nearly 0A) on one of the input phases. 0 = no alert 1-3 = input phase
126	307	system_status	**sssnsa**	sensorChangeAlert	int	1	1	1		ro	ALL	-	-		Alert status on whether the sensor type changed 0 = no alert 1 = sensor type changed
240	308	system_status	**ssovda**	outletVoltageDropAlert	int	1	1	1		ro	ALL	-	-		Alert status on whether a voltage drop occurred on one of the outlets, indicating a possible blown fuse or otherwise failing outlet. 0 = no alert 1-54 = outlet number where the drop was first detected (not necessarily the first to fail)
264	309	system_status	**ssbtri**	branchCurrentAlert	int	1	1	1		ro	ALL				Alert status on whether branch current exceeded threshold. 0 = no alert 1-6 = branch number
264	310	system_status	**ssbvda**	branchVoltageDropAlert	int	1	1	1		ro	ALL				Alert status on whether a voltage drop occurred on one of the branches, indicating a possible blown fuse or otherwise failing outlet. 0 = no alert 1-6 = branch number where the drop was first detected (not necessarily the first to fail)
264	311	system_status	**ssbcda**	bCurrentDropAlert	int	1	1	1		ro	ALL				Alert status on whether a current drop occured (to nearly 0A) on one of the branches, indicating a possible blown fuse. 0 = no alert 1-6 = branch number
264	312	system_status	**ssbtrv**	branchVoltageAlert	int	1	1	1		ro	ALL				Alert status on whether a voltage drop occurred on the branch. 0 = no alert. 1-6 = branch number
266	313	system_status	**ssntri**	neutralCurrentAlert	int	1	1	1		ro	ALL				Alert status on whether a voltage drop occurred on the branch. 0 = no alert. 1 = alert active
266	314	system_status	**ssrtri**	residualCurrentAlert	int	1	1	1		ro	ALL				Alert status on whether residual current is over its defined limit. 0 = no alert 1 = alert active
266	315	system_status	**ssshwa**	hardwareAlert	int	1	1	1		ro	ALL				Alert for slave not responding. 0 = no alert. >0 = slave number not responding
	400	reset	**rsboot**	rebootDevice	int	1	1	1		wo	-	ALL	user		Writing '1' to this register will invoke a warm restart/reset of the device. Note that this will have no effect on outlet status!
	401	reset	**rsalrt**	resetAlerts	int	1	1	1		wo	-	ALL	user		Writing '1' to this register will reset all alerts.
	402	reset	**rsimks**	zeroInputKWhSubtotal	int	1	1	1		wo	-	DATABUS, IPAPI, SNMP, MODBUS, DATABUS_INFRA, WEBAPI	power		Writing '1' to this register will reset the input kWh subtotal counters to zero.
	403	reset	**rsomks**	zeroOutKWhSubtotal	int	1	27	27	•	wo	-	DATABUS, IPAPI, SNMP, MODBUS, DATABUS_INFRA, WEBAPI	power		Writing '1' to this register will reset the corresponding outlet's kWh subtotal counter to zero.
	430	reset	**rspval**	resetPeakValues	int	1	1	1		wo	-	ALL	user		Writing '1' to this register will reset all peak values to zero for both input/output metering, voltage drops, current and temperatures peaks.
130	431	reset	**rsipks**	zeroSingleInputKWhSubtotal	int	1	3	3		wo	-	DATABUS, IPAPI, SNMP, MODBUS, DATABUS_INFRA, WEBAPI	power		Writing '1' to one to this register will reset the kWh subtotal counter to zero for the responding phase input.
264	434	reset	**rsbmks**	ResetBranchKWhSubtotal	int	1	18	18		wo		ALL	power		Writing '1' to this register will reset the corresponding branche's kWh subtotal counter to zero.

added	register	group	mnemonic	name	datatype	bytes	repeats	size	extension	access	readable by	writable by	write access	**reboot**	description
	1000	settings	**stdvnm**	deviceName	ascii	16	1	16		rw	ALL	ALL	admin		User configurable device name or identifier.
	1016	settings	**stdvlc**	deviceLocation	ascii	16	1	16		rw	ALL	ALL	admin		User configurable device location identifier.
	1032	settings	**stuser**	vanityTag	ascii	20	1	20		rw	ALL	ALL	admin		String to be displayed as vanity text on the display.
	1052	settings	**stpkdr**	peakDuration	int	2	1	2		rw	ALL	DATABUS, IPAPI, SNMP, MODBUS, DATABUS_INFRA, WEBAPI	power		Denotes the duration of a peak before an alert will be triggered. Put differently, if a current peak lasts at least [stpkdr] milliseconds, then an alert is raised. Maximum time is roughly a minute.
	1054	settings	**strsal**	localAlertReset	int	1	1	1		rw	ALL	DATABUS, IPAPI, SNMP, MODBUS, DATABUS_INFRA, WEBAPI	power		Setting this register to '1' will allow a physical alert status reset by pressing both device buttons simultaneously. Without this set pressing both buttons at the same time will default the display to the "LOAD" tab.
240	1055	settings	**stextn**	extendedNames	int	1	1	1		rw	ALL	ALL	admin		Setting this register to '1' will enable the use of the 18 character registers for input, outlet and sensor names to display the name on the LCD, web interface and SNMP.
	1056	settings	**stfodl**	fixedOutletDelay	int	2	1	2		rw	ALL	DATABUS, IPAPI, SNMP, MODBUS, DATABUS_INFRA, WEBAPI	power		Minimal delay between relay switch requests in milliseconds. Default delay is 250ms since v268 and will therefore always be respected! The minimum delay is 100ms.
	1058	settings	**stpsav**	powerSaverMode	int	1	1	1		rw	ALL	DATABUS, IPAPI, SNMP, MODBUS, WEBAPI	user		Delay, in seconds, until backlight should deactivate; 0 keeps display always on. Note that keeping the backlight on for extended periods may decrease luminosity. Setting this to other values than 10, 60, 120 or 240 is incompatible with the gateway!
	1059	settings	**stopom**	outletPowerupMode	int	1	1	1		rw	ALL	DATABUS, IPAPI, SNMP, MODBUS, DATABUS_INFRA, WEBAPI	power		Behaviour of outlet on power-up. 0 = off 1 = same state as at power down use default switch delay 2 = same state, but delayed by individual delay timer 3 = Outlets will always stay on (even at power down!)* * this setting is only available for PDU's produced after 01-01-2018
	1060	settings	**stmaxt**	maximumTemperature	int	1	1	1		rw	ALL	DATABUS, IPAPI, SNMP, MODBUS, DATABUS_INFRA, WEBAPI	power		A temperature alert should be raised whenever the temperature is above this register's value. A value of zero means this setting is disabled. Applies to internal temperature unless an external sensor is connected. Value is in degrees celcius.
	1061	settings	**stdiso**	displayOrientation	int	1	1	1		rw	ALL	DATABUS, IPAPI, SNMP, MODBUS, WEBAPI	user		Orientation of the display's user interface. 0 = no display 1 = vertical, default orientation 2 = vertical, upside down 3 = horizontal, 90 degrees clockwise from default orientation 4 = horizontal, 90 degrees counter-clockwise from default orientation
	1062	settings	**stimcm**	maxInletAmps	fd	2	3	6		rw	ALL	DATABUS, IPAPI, SNMP, MODBUS, DATABUS_INFRA, WEBAPI	power		Maximum current per input phase. If an input current value exceeds this value and lasts at least [stpkdr] milliseconds, then an alert will be triggered.
	1068	settings	**stomcm**	maxOutletAmps	fd	2	27	54	•	rw	ALL	DATABUS, IPAPI, SNMP, MODBUS, DATABUS_INFRA, WEBAPI	power		Maximum current per outlet. If an outlet current value exceeds this value and lasts at least [stpkdr] milliseconds, then an alert will be triggered.
	1122	settings	**stomct**	outputCTratio	int	1	27	27	•	rw	ALL	DATABUS, IPAPI, SNMP, MODBUS, DATABUS_INFRA, WEBAPI	power		DPM3/DPM27 only! The multiplier to use in case /5 current transformers are used. Defaults to 1.
	1149	settings	**stimct**	inputCTratio	int	1	3	3		rw	ALL	DATABUS, IPAPI, SNMP, MODBUS, DATABUS_INFRA, WEBAPI	power		DPM3/DPM27 only! The multiplier to use in case /5 current transformers are used. Defaults to 1.
	1152	settings	**stinnm**	inputName	ascii	8	3	24		rw	ALL	ALL	admin		User configurable naming of the inputs or phases.
	1176	settings	**stolnm**	outletName	ascii	8	27	216	•	rw	ALL	DATABUS, IPAPI, SNMP, MODBUS, DATABUS_INFRA, WEBAPI	power		User configurable naming of individual outlets.
	1392	settings	**stiodl**	indivOutletDelay	int	2	27	54	•	rw	ALL	DATABUS, IPAPI, SNMP, MODBUS, DATABUS_INFRA, WEBAPI	power		Delay before an individual outlet's relay switches on at power-up, in seconds.

added	register	group	mnemonic	name	datatype	bytes	repeats	size	extension	access	readable by	writable by	write access	**reboot**	description
	1446	settings	**stcddt**	currentDropDetection	int	1	1	1		rw	ALL	DATABUS, IPAPI, SNMP, MODBUS, DATABUS_INFRA, WEBAPI	power		Enables the current drop detection function. 0 = always off (default) 1 = input(s) only 2 = output(s) only 3 = both inputs and outputs
126	1447	settings	**stsnsa**	sensorChangeAlertMode	int	1	1	1		rw	ALL	DATABUS, IPAPI, SNMP, MODBUS, DATABUS_INFRA, WEBAPI	power		Enables the sensor channel change detection. 0 = off (default) 1 = on
132	1448	settings	**stunlo**	outletUnlock	int	1	1	1		rw	ALL	DATABUS, IPAPI, MODBUS,WEBAPI	user		Overrides the timeout of [swounl]. If this is set to 1 then the timeout will be ignored, otherwise the timeout will be taken into account. Outlet states can't be changed using SPST.
132	1449	settings	**strebt**	outletPowerCycle	int	1	27	27	•	rw	ALL	DATABUS, IPAPI, SNMP, MODBUS, WEBAPI	user		Individual power cycle timer. This is the amount, in seconds, for each outlet (denoted by the channel) to wait until the relay should be switched on again.
240	1476	settings	**starsa**	autoResetAlerts	int	2	1	2		rw	ALL	DATABUS, IPAPI, SNMP, MODBUS, DATABUS_INFRA, WEBAPI	power		Set to '0' to disable automatic resetting of alerts. Any other value (up to 65535) enables the automatic resetting of alerts. The configured number is the number of seconds to wait before resetting the alerts. The timer starts after an alert condition disappears. If in the mean time a new alert occurs, the timer will restart counting.
262	1478	settings	**stblsu**	locateUnit	int	1	1	1		rw	ALL	ALL	user		With this function you can locate a unit. The LCD-backlight flash in the rhythm of a heartbeat to locate a unit. Set to '1' to switch on and to '0' to switch off this function.
266	1479	settings	**stnmcm**	maxNeutralAmps	fd	2	1	2		rw	ALL	ALL	power		Maximum neutral current. If the neutral current value exceeds this value and lasts at least [stpkdr] milliseconds, then an alert will be triggered.
266	1483	settings	**strmcm**	maxResidualCurrent	fd	2	1	2		rw	ALL	ALL	power		Maximum residual current in mA. If the neutral current value exceeds this value and lasts at least [stpkdr] milliseconds, then an alert will be triggered.
	2000	switched_outlets	**swocst**	currentState	int	1	27	27	•	rw	ALL	DATABUS, IPAPI, SNMP, MODBUS, WEBAPI	user		The state of the outlet relay(s). Note that for pdu's produced before 2018 reading a '1' does not necessarily mean it's enabled at that very moment but could also mean that the outlet's scheduled to be enabled. Writing is only effective after setting [swounl], or [stunlo]. for PDU's produced after 2018 this setting will reflect the actual state of the outlet. Outlet states can't be changed using SPST.
	2027	switched_outlets	**swosch**	scheduled	int	1	27	27	•	ro	ALL	-	-		A '1' indicates pending activity. Together with [swocst], this can denote the actual current state of the outlet relay(s) and whether it's planned to be enabled or disabled.
126	2054	switched_outlets	**sworeb**	powerCycle	int	1	27	27	•	rw	ALL	DATABUS, IPAPI, SNMP, MODBUS, WEBAPI	user		Writing '1' will cause the outlet to power cycle. Writing only effective if either [swounl] or [stunlo], and [swocst]'s value is set ([swounl] OR [stunlo]) AND [swocst].
	2081	switched_outlets	**swounl**	unlock	int	1	27	27	•	rw	ALL	DATABUS, IPAPI, SNMP, MODBUS, WEBAPI	user		Writing '1' to this register will release the safety for this outlet for a couple seconds. Switching and rebooting are temporarily enabled. Outlet states can't be changed in SPST.
	3000	input_measures	**imkwht**	inputkWhTotal	int	3	3	9		ro	ALL	-	-		Either the only phase in a single phase measurement; or one of the three phases in a multiphase measurement. This value is not resetable.
	3009	input_measures	**imkwhs**	inputkWhSubtotal	int	3	3	9		ro	ALL	-	-		kWh subtotal register of the only phase in a single phase measurement; or one of three phases in a multiphase measurement. Reset to zero with [rsimks].
	3018	input_measures	**impfac**	inputPowerFactor	fd	2	3	6		ro	ALL	-	-		The effective power factor in percent.(not available in Delta wiring mode)
	3024	input_measures	**imcrac**	inputActualCurrent	fd	2	3	6		ro	ALL	-	-		Actual apparent, RMS current.
	3030	input_measures	**imcrpk**	inputPeakCurrent	fd	2	3	6		ro	ALL	-	-		Peak apparent, RMS current; highest value since last reset of the peaks.
	3036	input_measures	**imvoac**	inputActualVoltage	fd	2	3	6		ro	ALL	-	-		The actual voltage.
	3042	input_measures	**imvodp**	inputMinVoltage	fd	2	3	6		ro	ALL	-	-		RMS voltage dip; lowest value since reset of dips.
	3048	input_measures	**imwkhf**	inputWhSubtotal fraction	int	4	3	12		ro	ALL	-	-		Fraction of kWh subtotal register, in microwatthour resolution, of the only phase in a single phase measurement; or one of three phases in a multiphase measurement. Reset to zero with [rsimks].
240	3060	input_measures	**imname**	extendedInputName	ascii	18	3	54		rw	ALL	ALL	admin		User configurable naming of the inputs or phases.

added	register	group	mnemonic	name	datatype	bytes	repeats	size	extension	access	readable by	writable by	write access	**reboot**	description
	4000	output_measures	**omkwht**	outputkWhTotal	int	3	27	81	•	ro	ALL	-	-		Total kWh of selected output. This value is not resetable.
	4081	output_measures	**omkwhs**	outputkWhSubtotal	int	3	27	81	•	ro	ALL	-	-		kWh subtotal register of selected output. Reset to zero with [rsomks].
	4162	output_measures	**ompfac**	outputPowerFactor	fd	2	27	54	•	ro	ALL	-	-		Power factor of output. (not available in Delta wiring mode)
	4216	output_measures	**omcrac**	outputActualCurrent	fd	2	27	54	•	ro	ALL	-	-		Actual apparent, RMS current.
	4270	output_measures	**omcrpk**	outputPeakCurrent	fd	2	27	54	•	ro	ALL	-	-		Peak apparent, RMS current; highest value since last reset of peaks.
	4324	output_measures	**omvoac**	outputActualVoltage	fd	2	27	54	•	ro	ALL	-	-		Actual voltage on output. Note that these may differ with each other and input metering. This difference may amount to 2%.
	4378	output_measures	**omuhws**	outletsMicroWhSubtotal	int	4	1	4		ro	DATABUS, IPAPI, WEBAPI, MODBUS	-	-		Fraction of sum of SUBWATTHR registers of all outlets in microwatthour units
	5000	pdu_measures	**pditem**	pduIntTemperature	fd	2	1	2		ro	ALL	-	-		Actual internal device temperature in degrees celcius.
	5002	pdu_measures	**pdetem**	pduExtTemperature	fd	2	1	2		ro	ALL	-	-		Actual external device temperature in degrees celcius (read from a plugged-in sensor).
	5004	pdu_measures	**pdinpk**	pduIntPeak temp	fd	2	1	2		ro	ALL	-	-		Peak internal device temperature in degrees celcius since last peak reset.
	5006	pdu_measures	**pdexpk**	pduExtPeak temp	fd	2	1	2		ro	ALL	-	-		Peak external device temperature in degrees celcius since last peak reset.
	5008	pdu_measures	**snstyp**	sensorType	ascii	1	16	16		ro	ALL	-	-		Returns the detected sensor type, can be: T = temperature (°C) H = humidity (%) I = dry switch input O = switch output R = residual current (mA) A = AC residual current (mA) D = DC residual current (mA) B = branch residual current (mA) S = error status Y = activity X = unused
	5024	pdu_measures	**snsval**	sensorValue	fd	2	16	32		ro	ALL	-	-		Returns the sensor value. When [snstyp] = 'T', it denotes temperature in degree Celsius. When [snstyp] = 'H', it denotes humidity in percent When [snstyp] = 'I', it denotes switch state as 0 or 1 or bitmap for different transition patterns.
	5056	pdu_measures	**snsnme**	sensorName	ascii	6	16	96		rw	ALL	DATABUS, IPAPI, SNMP, MODBUS, DATABUS_INFRA, WEBAPI	power		User definable name for sensors.
240	5152	pdu_measures	**snsenm**	extendedSensorName	ascii	18	16	288		rw	ALL	DATABUS, IPAPI, SNMP, MODBUS, DATABUS_INFRA, WEBAPI	power		User definable name for sensors.
240	6000	ext_outlet_names	**exolnm**	extendedOutletName	ascii	18	27	486	•	rw		DATABUS, IPAPI, SNMP, MODBUS, DATABUS_INFRA, WEBAPI	power		User configurable naming of individual outlets.
	9000	virtual	**viwatt**	virtualInputWatt	fd	2	3	6		ro	ALL	-	-		Input wattage (in kW), calculated by the device using current, voltage, and power factor measurements of a phase (phase is denoted by repeat/channel). Wattage = current * voltage * powerfactor / 100 / 1000
	9006	virtual	**vivamp**	virtualInputVA	fd	2	3	6		ro	ALL	-	-		Input VA (volt-amps, in kVA), calculated by the device using current and voltage measurements of a phase (phase is denoted by repeat/channel). VA = current * voltage / 1000
	9012	virtual	**vowatt**	virtualOutputWatt	fd	2	54	108		ro	ALL	-	-		Output wattage (in kW), calculated by the device using current, voltage, and power factor measurements of an outlet (outlet number is denoted by repeat/channel). Wattage = current * voltage * powerfactor / 100 / 1000. extended in FW252
	9120	virtual	**vovamp**	virtualOutputVA	fd	2	54	108		ro	ALL	-	-		Output VA (volt-amps, in kVA), calculated by the device using current and voltage measurements of an outlet (outlet number is denoted by repeat/channel). VA = current * voltage / 1000. Shifted and extended in FW252

added	register	group	mnemonic	name	datatype	bytes	repeats	size	extension	access	readable by	writable by	write access	**reboot**	description
264	9228	virtual	**brwatt**	virtualBranchWatt	fd	2	18	36		ro	ALL	-	-		Branch wattage (in kW), calculated by the device using current, voltage, and power factor measurements of an outlet (outlet number is denoted by repeat/channel). Wattage = current * voltage * powerfactor / 100 / 1000.
264	9264	virtual	**brvamp**	virtualBranchVA	fd	2	18	36		ro	ALL	-	-		Branch VA (volt-amps, in kVA), calculated by the device using current and voltage measurements of an outlet (outlet number is denoted by repeat/channel). VA = current * voltage / 1000.
264	9300	virtual	**towatt**	virtualTotalsWatt	fd	2	1	2		ro	ALL	-	-		Totals wattage (in kW), calculated by the device using current, voltage, and power factor measurements of an outlet (outlet number is denoted by repeat/channel). Wattage = current * voltage * powerfactor / 100 / 1000.
264	9302	virtual	**tovamp**	virtualTotalsVA	fd	2	1	2		ro	ALL	-	-		Totals VA (volt-amps, in kVA), calculated by the device using current and voltage measurements of an outlet (outlet number is denoted by repeat/channel). VA = current * voltage / 1000.
264	21000	branch_measures	**brkwht**	branchkWhTotal	int	3	18	54		ro	ALL	-	-		Either the only phase in a single phase measurement; or one of the three phases in a multiphase measurement. This value is not resetable. 24-bit little-endian integer.
264	21054	branch_measures	**brkwhs**	branchkWhSubtotal	int	3	18	54		ro	ALL	-	-		kWh subtotal register of the only phase in a single phase measurement; or one of three phases in a multiphase measurement. Reset to zero with [rsimks]. 24-bit little-endian integer.
264	21108	branch_measures	**brpfac**	branchpowerFactor	fd	2	18	36		ro	ALL	-	-		The effective power factor in percent.(not available in Delta wiring mode)
264	21144	branch_measures	**brcrac**	branchactualCurrent	fd	2	18	36		ro	ALL	-	-		Actual apparent, RMS current.
264	21180	branch_measures	**brcrpk**	branchpeakCurrent	fd	2	18	36		ro	ALL	-	-		Peak apparent, RMS current; highest value since last reset of the peaks.
264	21216	branch_measures	**brvoac**	branchactualVoltage	fd	2	18	36		ro	ALL	-	-		The actual voltage.
264	21252	branch_measures	**brvodp**	branchminVoltage	fd	2	18	36		ro	ALL	-	-		RMS voltage dip; lowest value since reset of dips.
264	21288	branch_measures	**brwkhf**	branchWhSubtotal fraction	int	4	18	72		ro	ALL	-	-		Fraction of kWh subtotal register, in microwatthour resolution, of the only phase in a single phase measurement; or one of three phases in a multiphase measurement. Reset to zero with [rsimks].
264	22000	totals_measures	**tokwht**	totalskWhTotal	int	3	1	3		ro	ALL	-	-		Either the only phase in a single phase measurement; or the kWh of the three phases added together in a multiphase measurement. This value is not resetable.
264	22003	totals_measures	**topfac**	totalspowerFactor	fd	2	1	2		ro	ALL	-	-		The effective power factor in percent.(not available in Delta wiring mode)
264	22005	totals_measures	**tocrac**	totalsactualCurrent	fd	2	1	2		ro	ALL	-	-		Actual apparent, RMS current.
264	22007	totals_measures	**tocrpk**	totalspeakCurrent	fd	2	1	2		ro	ALL	-	-		Peak apparent, RMS current; highest value since last reset of the peaks.
264	22009	totals_measures	**tovoac**	totalsactualVoltage	fd	2	1	2		ro	ALL	-	-		The actual voltage.
264	22011	totals_measures	**tovodp**	totalsminVoltage	fd	2	1	2		ro	ALL	-	-		RMS voltage dip; lowest value since reset of dips.
266	22013	totals_measures	**toneut**	neutralCurrent	fd	2	1	2		ro	ALL	-	-		Neutral current.
266	22015	totals_measures	**tonepk**	neutralPeak	fd	2	1	2		ro	ALL	-	-		Peak neutral current
266	22017	totals_measures	**torcsc**	residualCurrent	fd	2	1	2		ro	ALL	-	-		Residual current
266	22019	totals_measures	**torcpk**	residualPeak	fd	2	1	2		ro	ALL	-	-		Peak residual current
264	24000	exsettings	**stbmcm**	maxBranchAmps	fd	2	18	36		rw	ALL	ALL	power		Maximum current per branch. If abranch current value exceeds this value and lasts at least [stpkdr] milliseconds, then an alert will be triggered.
264	24054	exsettings	**stbmnm**	extendedbranchName	ascii	18	18	324		rw	ALL	ALL	admin		User configurable naming of the inputs or phases. always returns 18 values regardless of PDU configuration.
	31000	ethernet	**etclst**	linkStatus	int	1	1	1		ro	WEBAPI	-	-		Link state flags register: 1 = Link error 2 = MII link busy 4 = Changed state 8 = Connected (if not set, it's not connected) 16 = 100Mbps mode (if not set then it's a 10mbps connection) 32 = Full-duplex mode (if not set, then it's a half-duplex connection)

added	register	group	mnemonic	name	datatype	bytes	repeats	size	extension	access	readable by	writable by	write access	**reboot**	description
	31001	ethernet	**etcnst**	networkStatus	int	1	1	1		ro	WEBAPI	-	-		Network state register: 0 = No cable 1 = DHCP acquiring 2 = DHCP bound 3 = Static 4 = DHCP static fallback 5 = Not configured
	31002	ethernet	**etcip4**	currentIPv4	ipv4	4	1	4		ro	WEBAPI	-	-		Active IPv4 address
	31003	ethernet	**etcnm4**	currentNetmask	ipv4	4	1	4		ro	WEBAPI	-	-		Active netmask
	31004	ethernet	**etcgw4**	currentGateway	ipv4	4	1	4		ro	WEBAPI	-	-		Active default gateway
	31005	ethernet	**etcdn1**	currentDNS1	ipv4	4	1	4		ro	WEBAPI	-	-		Active primary DNS
	31006	ethernet	**etcdn2**	currentDNS2	ipv4	4	1	4		ro	WEBAPI	-	-		Active secondary DNS
	31007	ethernet	**etchnm**	currentHostname	ascii	64	1	64		ro	WEBAPI	-	-		Active device hostname
244	31008	ethernet	**etcp60**	currentIPv6addrll	ipv6	16	1	16		ro	WEBAPI	-	-		Current IPv6 link-local address
244	31009	ethernet	**etcp61**	currentIPv6addr1	ipv6	16	1	16		ro	WEBAPI	-	-		Current IPv6 address 1 (usually used for private networks)
244	31010	ethernet	**etcp62**	currentIPv6addr2	ipv6	16	1	16		ro	WEBAPI	-	-		Current IPv6 address 2 (usually used globally)
	31020	ethernet	**etdhen**	dhcp	int	1	1	1		rw	WEBAPI	WEBAPI	power	•	DHCP enable. 0 = disabled 1 = enabled
	31021	ethernet	**etdhfb**	dhcpFallbackEnable	int	1	1	1		rw	WEBAPI	WEBAPI	power	•	DHCP fallback enable bit, allows the device to fallback to a static address. 0 = disabled 1 = enabled
	31022	ethernet	**etdhfd**	dhcpFallbackDelay	int	1	1	1		rw	WEBAPI	WEBAPI	power	•	How long to wait (in seconds) for DHCP to work until it is assumed it won't and fallback to a static address.
244	31023	ethernet	**etipvs**	ipVersion	int	1	1	1		rw	WEBAPI	WEBAPI	power	•	Which IP version to use. 1 = IPv4 only 2 = IPv6 only 3 = IPv4/IPv6 Dual-stack
	31024	ethernet	**etsip4**	ipv4Address	ipv4	4	1	4		rw	WEBAPI	WEBAPI	power	•	Static IPv4 address. Used as either the fallback or the static IPv4 address.
	31025	ethernet	**etsnm4**	ipv4SubnetMask	ipv4	4	1	4		rw	WEBAPI	WEBAPI	power	•	Static netmask. Used as either the fallback or the static netmask.
	31026	ethernet	**etsgw4**	ipv4Gateway	ipv4	4	1	4		rw	WEBAPI	WEBAPI	power	•	Static gateway. Used either the fallback or the static gateway.
	31027	ethernet	**etsdn1**	ipv4DNS1	ipv4	4	1	4		rw	WEBAPI	WEBAPI	power	•	Static primary DNS. Used as either the fallback or the static primary DNS.
	31028	ethernet	**etsdn2**	ipv4DNS2	ipv4	4	1	4		rw	WEBAPI	WEBAPI	power	•	Static secondary DNS. Used as either the fallback or the secondary DNS.
	31029	ethernet	**etshnm**	hostname	ascii	64	1	64		rw	WEBAPI	WEBAPI	power	•	Static hostname. Used for either the fallback or as the static hostname.
	31030	ethernet	**etaips**	ipv4AcceptedIps	ipv4	4	3	12		rw	WEBAPI	WEBAPI	power	•	3 IPv4 addresses that are allowed to connect to the device.
	31033	ethernet	**etaipm**	ipv4AcceptedIpsPrefix	int	1	3	3		rw	WEBAPI	WEBAPI	power	•	Denotes the accepted IPv4's subnet mask (using CIDR notation).
	31036	ethernet	**ethmod**	hPDUmode	int	4	1	4		rw	WEBAPI	WEBAPI	admin	•	hPDU mode flag register: 0 = HPDUMODE_CLASSIC 5 = HPDUMODE_HYBRID 7 = HPDUMODE_BRIDGE 13 = HPDUMODE_COLO_INFRA 21 = HPDUMODE_COLO_ENDUSER 39 = HPDU_TWIN_MASTER
242	31037	ethernet	**etlsdm**	Link Speed/Duplex Mode	int	1	1	1		rw	WEBAPI	WEBAPI	power	•	Link Speed and Duplex Mode configuration: 0 = autonegotiation 1 =10Base-T Half Duplex 2 = 10Base-T Full Duplex 3 = 100Base-T Half Duplex 4 = 100Base-T Full Duplex
244	31038	ethernet	**etip61**	ipv6Address1	ipv6	16	1	16		rw	WEBAPI	WEBAPI	power	•	First static IPv6 address. Used as either the fallback or the static IPv6 address.
244	31039	ethernet	**etip62**	ipv6Address2	ipv6	16	1	16		rw	WEBAPI	WEBAPI	power	•	Second static IPv6 address. Used as either the fallback or the static IPv Leave blank to disable.
244	31040	ethernet	**etip6s**	ipv6AcceptedIPs	ipv6	16	3	48		rw	WEBAPI	WEBAPI	power	•	3 IPv6 addresses that are allowed to connect to the device.

added	register	group	mnemonic	name	datatype	bytes	repeats	size	extension	access	readable by	writable by	write access	**reboot**	description
244	31043	ethernet	**etip6p**	ipv6AcceptedIPsPrefix	int	1	3	3		rw	WEBAPI	WEBAPI	power	•	Denotes the accepted IP6's subnet mask (using CIDR notation).
244	31046	ethernet	**etip6a**	ipv6AutoconfEnabled	int	1	1	1		rw	WEBAPI	WEBAPI	power	•	IPv6 Stateless local address auto configuration enable. 0 = disabled (use static address), 1 = enabled (obtain through ICMP6)
244	31047	ethernet	**etip6f**	ipv6StaticFallbackEnabled	int	1	1	1		rw	WEBAPI	WEBAPI	power	•	IPv6 static IP fallback. 0 = disabled 1 = enabled
	31100	ipapi	**iaenab**	ipapiEnable	int	1	1	1		rw	WEBAPI	WEBAPI	power	•	IPAPI enable. 1 = enabled 0 = disabled
	31101	ipapi	**iarc4k**	ipapiARC4key	ascii	16	1	16		rw	WEBAPI	WEBAPI	power	•	ARC4 key used in the IPAPI exchange.
	31300	http	**hthpen**	httpInterfaceEnable	int	1	1	1		rw	WEBAPI	WEBAPI	power	•	HTTP webinterface enable. 1 = enabled, 0 = disabled
258	31301	http	**hthsen**	httpsInterfaceEnable	int	1	1	1		rw	WEBAPI	WEBAPI	power	•	HTTPS webinterface enable. 0 = HTTPS disabled, HTTP disabled 1 = HTTPS disabled, HTTP enabled 2 = HTTPS enabled, HTTP disabled 3 = HTTPS enabled, HTTP enabled
	31302	http	**hthppo**	httpInterfacePort	int	2	1	2		rw	WEBAPI	WEBAPI	power	•	Port used for HTTP webinterface
	31303	http	**hthspo**	httpsInterfacePort	int	2	1	2		rw	WEBAPI	WEBAPI	power	•	Port used for HTTPS webinterface
258	31304	http	**hthcrt**	httpsCertEnable	int	1	1	1		rw	WEBAPI	WEBAPI	power	•	Enable HTTPS certificate loading from external flash
258	31305	http	**hthscn**	httpsCertCn	ascii	64	1	64		ro	WEBAPI	WEBAPI	power	•	Name of certificate CN (Common Name) used
	31600	snmp	**snmpv1**	v1Andv2Enable	int	1	1	1		rw	WEBAPI	WEBAPI	power	•	SNMP v1 and v2 enable. 1 = enabled 0 = disabled
242	31601	snmp	**snmpv3**	snmpv3Enable	int	1	1	1		rw	WEBAPI	WEBAPI	power	•	SNMP v3 enable. 1 = enabled 0 = disabled
	31602	snmp	**sntrap**	trapEnable	int	1	1	1		rw	WEBAPI	WEBAPI	power	•	SNMP trap enable. 1 = enabled 0 = disabled
	31603	snmp	**sndst1**	trapDestination1	ascii	64	1	64		rw	WEBAPI	WEBAPI	power	•	Destination 1 for trap messages. Must be a IPv4/IPv6 address; you can not use a hostname
	31604	snmp	**sndst2**	trapDestination2	ascii	64	1	64		rw	WEBAPI	WEBAPI	power	•	Destination 1 for trap messages. Must be a IPv4/IPv6 address; you can not use a hostname
	31605	snmp	**snmpro**	snmpReadOnly	int	1	1	1		rw	WEBAPI	WEBAPI	power	•	SNMP behavior enable. 0 = disabled 1 = Read-only 2 = Read-only with scan
	31606	snmp	**snmplp**	snmpListenPort	int	2	1	2		rw	WEBAPI	WEBAPI	power	•	Port on which SNMP listens
	31607	snmp	**snmptp**	snmpTrapPort	int	2	1	2		rw	WEBAPI	WEBAPI	power	•	Port to which trap sends trap
	31608	snmp	**sncmpb**	readCommunity	ascii	16	1	16		rw	WEBAPI	WEBAPI	power	•	SNMP read community string
	31609	snmp	**sncmpr**	writeCommunity	ascii	16	1	16		rw	WEBAPI	WEBAPI	power	•	SNMP write community string
	31610	snmp	**sncmtr**	trapCommunity	ascii	16	1	16		rw	WEBAPI	WEBAPI	power	•	Trap community string
	31612	snmp	**snisdn**	snmpDeviceName	ascii	64	1	64		rw	WEBAPI	WEBAPI	power		Device name
	31613	snmp	**snisdl**	snmpDeviceLocation	ascii	64	1	64		rw	WEBAPI	WEBAPI	power		Device location
	31614	snmp	**snisdc**	snmpDeviceContact	ascii	64	1	64		rw	WEBAPI	WEBAPI	power		Device contact
	31615	snmp	**sntrds**	trapDeviceStatusCode	int	1	1	1		rw	WEBAPI	WEBAPI	power		If set, the device will send device status code traps
	31616	snmp	**sntrta**	trapTempAlert	int	1	1	1		rw	WEBAPI	WEBAPI	power		If set, the device will send temperature alert traps
	31617	snmp	**sntric**	trapInputCurrentAlert	int	1	1	1		rw	WEBAPI	WEBAPI	power		If set, the device will send input current alert traps
	31618	snmp	**sntroc**	trapOutputCurrentAlert	int	1	1	1		rw	WEBAPI	WEBAPI	power		If set, the device will send output current alert traps
	31619	snmp	**sntriv**	trapInputVoltageAlert	int	1	1	1		rw	WEBAPI	WEBAPI	power		If set, the device will send input voltage alert traps
	31620	snmp	**sntrod**	trapOutputCurrentDropAlert	int	1	1	1		rw	WEBAPI	WEBAPI	power		If set, the device will send output current drop alert traps
	31621	snmp	**sntrid**	trapInputCurrentDropAlert	int	1	1	1		rw	WEBAPI	WEBAPI	power		If set, the device will send input current drop alert traps
	31622	snmp	**sntraf**	trapSnmpAuthFailure	int	1	1	1		rw	WEBAPI	WEBAPI	power		If set, the device will send snmp authentication traps
	31623	snmp	**sntrnc**	trapNetworkConnectivity	int	1	1	1		rw	WEBAPI	WEBAPI	power		Signifies network connectivity. Will send coldstart trap if set.

added	register	group	mnemonic	name	datatype	bytes	repeats	size	extension	access	readable by	writable by	write access	**reboot**	description
	31624	snmp	**sntrsc**	trapSensorChangeAlert	int	1	1	1		rw	WEBAPI	WEBAPI	power		If set, the device will send sensor change alert traps
	31625	snmp	**sntrrc**	trapRingStateChanged	int	1	1	1		rw	WEBAPI	WEBAPI	power		If set, the device will send ring state change traps
	31626	snmp	**sntrov**	trapOutletVoltageDropAlert	int	1	1	1		rw	WEBAPI	WEBAPI	power		If set, the device will send outlet voltage drop alert traps
266	31627	snmp	**sntrra**	trapResidualCurrentAlert	int	1	1	1		rw	WEBAPI	WEBAPI	power		If set, the device will send residual current alert traps
266	31628	snmp	**sntrha**	trapHardwareAlert	int	1	1	1		rw	WEBAPI	WEBAPI	power		If set, the device will send hardware alert traps
	31700	users	**usname**	usersUsername	ascii	16	5	80		rw	WEBAPI, SNMP	WEBAPI	-		Webapi and SNMPv3 username (Change usernames and passwords for super, admin, power, user and viewer role)
	31710	users	**uspswd**	usersPassword	ascii	16	5	80		wo	-	WEBAPI	-		Webapi password
242	31720	users	**uspsea**	passwordEncA	int	32	5	5		wo	-	WEBAPI	-		SNMPv3 authentication key
242	31730	users	**uspseb**	passwordEncB	int	32	5	20		wo	-	WEBAPI	-		SNMPv3 encryption key
	31740	users	**usacrd**	usersRead	int	4	5	20		rw	DATABUS, IPAPI, WEBAPI	WEBAPI	admin		Defines the read access permissions of a userid where the userid level is denoted by channel
	31750	users	**usacwr**	usersWrite	int	4	5	20		rw	DATABUS, IPAPI, WEBAPI	WEBAPI	admin		Defines the write access permissions of a userid where the userid level is denoted by channel
242	31760	users	**usprau**	usersAuthenticationProtocol	int	1	5	10		rw	WEBAPI, SNMP	WEBAPI	-		SNMPv3 authentication protocol
242	31770	users	**usprpr**	usersPrivateProtocol	int	1	5	10		rw	WEBAPI, SNMP	WEBAPI	-		SNMPv3 encryption protocol
	32000	modbus	**mbtcen**	modbusEnable	int	1	1	1		rw	WEBAPI	WEBAPI	power	•	Modbus enable. 1 = enabled 0 = disabled
	32001	modbus	**mbtcro**	modbusReadOnly	int	1	1	1		rw	WEBAPI	WEBAPI	power	•	1 = modbus is in read-only mode.
	32002	modbus	**mbtcpo**	modbusPort	int	2	1	2		rw	WEBAPI	WEBAPI	power	•	Port used for modbus communication
130	40000	host	**honruf**	nrUnitsFound	int	2	1	2		ro	IPAPI, WEBAPI, SNMP, MODBUS	-	-		Result of scan command, denotes the number of devices on the SPBUS network.
136	40002	host	**horist**	ringStatus	int	2	1	2		ro	IPAPI, WEBAPI, SNMP, MODBUS	-	-		SPBUS network architecture configuration. 0 = open ring network 1 = closed ring network
136	40004	host	**hobrin**	ringBreakLocation	int	2	1	2		ro	IPAPI, WEBAPI, SNMP, MODBUS	-	-		Device index of the ring break location. Can be used to determine between which devices the ring is broken.
130	40100	host	**hoscbu**	scanBus	int	2	1	2		wo	-	IPAPI, WEBAPI, SNMP, MODBUS	admin		Writing '1' to this register will invoke a scan.
130	40104	host	**hocmrn**	renumAllFromN	int	2	1	2		wo	-	IPAPI, WEBAPI, SNMP, MODBUS	admin		Renumber devices on SPBUS network sequentially. Starts with the number written to this register on. Note that this overwrites all existing addresses! E.g.: writing '5' will renumber all devices on the SPBUS, giving them an iterating address number starting from address 5 (5, 6, 7, ...)
130	40106	host	**hocmrz**	renumAddrZeroC	int	2	1	2		wo	-	IPAPI, WEBAPI, SNMP, MODBUS	admin		Renumber all devices with address 0 in a sequential order.
242	40110	host	**hocmra**	resetAllAlerts	int	2	1	2		wo	-	IPAPI, WEBAPI, SNMP, MODBUS	admin		Reset alerts of all devices
130	40200	host	**hounad**	unitAddressList	int	2	256	512		ro	IPAPI, WEBAPI, SNMP, MODBUS	-	-		List of unit addresses known to the device. Position ordered list of assigned unit addresses.
130	40712	host	**hohid1**	hardwareID1	int	2	256	512		ro	IPAPI, WEBAPI, SNMP, MODBUS	-	-		Position ordered list (same order as [hounad]) of first element (11111) of the 3-tuple hardware ID. [Example: 11111-22222-33333]
130	41224	host	**hohid2**	hardwareID2	int	2	256	512		ro	IPAPI, WEBAPI, SNMP, MODBUS	-	-		Position ordered list (same order as [hounad]) of second element (22222) of the 3-tuple hardware ID. [Example: 11111-22222-33333]
130	41736	host	**hohid3**	hardwareID3	int	2	256	512		ro	IPAPI, WEBAPI, SNMP, MODBUS	-	-		Position ordered list (same order as [hounad]) of third element (33333) of the 3-tuple hardware ID. [Example: 11111-22222-33333]