SCHLEIFENBAUER

PDU 5.0 Modbus Registers

Version 1.0

Register	Group	Code	Name	Unit	Datatype	Bytes	Repeats	Access	Definition
100	identification	**iddate**	IdBirthday		string	16	1	ro	Date Of Manufacture (DOM)
108	identification	**iddvlc**	IdDeviceLocation		string	64	1	ro	User configurable device location identifier.
140	identification	**iddvnm**	IdDeviceName		string	64	1	ro	User configurable device name or identifier.
172	identification	**idmaca**	IdMacAddress		int	1	6	ro	MAC address as 6-tuple of bytes.
178	identification	**idmdfw**	IdModuleFirmware		string	16	1	ro	Firmware version number.
186	identification	**idmdsn**	IdModuleSerialNumber		string	16	1	ro	Module serial number.
194	identification	**idmdsw**	IdSoftwareVersion		string	16	1	ro	Software version number, only applicable for controller module
202	identification	**idmodt**	IdModuleType		int	1	1	ro	Device category: 0 = Daisychain Module, 1 = Gateway Module, 2 = Controller Module (SF also uses -1 to meaning no module!)
203	identification	**idmopn**	IdModulePartNo		string	16	1	ro	Module part number
211	identification	**idonbr**	IdSalesOrderNumber		string	16	1	ro	Sales order number.
219	identification	**idpart**	IdProduct		string	16	1	ro	Product id.
227	identification	**idsnbr**	IdSerialNumber		int	4	1	ro	Serial number.
300	configuration	**cfamps**	ConfigMaximumLoad	A	int	1	1	ro	Maximum rated load of the device per phase (this value is also mentioned on the PDU profile), usually either 16A, 32A or 63A.
302	configuration	**cfcunm**	ConfigCustomerName		string	64	1	ro	Custom 64 character name field for the customer.
334	configuration	**cffofa**	ConfigFormFactor		string	16	1	ro	Formfactor of the device.
342	configuration	**cfleng**	ConfigLength		int	1	1	ro	Length of the device in millimeter.
344	configuration	**cfnrbr**	ConfigNoBranches		int	1	1	ro	The number of branches available in the PDU, can be zero if no branches are available in the configuration.
346	configuration	**cfnrmo**	ConfigNrOutlMeasured		int	1	1	ro	Number of measured outlets available in the PDU. If numbering of outlets used is non-contiguous: the highest outlet number is assumed as amount of measured outlets.
350	configuration	**cfnrno**	ConfigNrOutletsTotal		int	1	1	ro	Total number of outlets available in the PDU, including hardwired outlets without a switchmeasure module.
352	configuration	**cfnrph**	ConfigNrPhases		int	1	1	ro	Total number of inputs: either zero (for no input metering), one or three for a single or three phase system
354	configuration	**cfnrso**	ConfigNrOutlSwitched		int	1	1	ro	Total number of switched outlets available. If the numbering of outlets used is non-contiguous: the highest outlet number is assumed as amount of switched outlets.
360	configuration	**cfvong**	ConfigVoltRating		string	16	1	ro	Voltage rating in V for this PDU.
500	daisychain	**dcbloc**	DChainBreakLocation		int	2	1	ro	Device index of the ring break location. Can be used to determine between which devices the ring is broken.
501	daisychain	**dcbsts**	DChainBusStatus		int	2	1	ro	SPBUS network architecture configuration. 0 = open ring network. 1 = closed ring network
502	daisychain	**dcnruf**	DChainNrUnitsFound		int	2	1	ro	Result of scan command, denotes the number of devices on the SPBUS network.
503	daisychain	**dcuali**	DChainUnitList		int	8	100	ro	List of unit addresses known to the device. Position ordered list of assigned unit addresses.
600	settings	**stcddt**	SetCurrentDropDetection		int	1	1	ro	Enable or disable current drop detection (0 = disabled, 1 = enabled)
601	settings	**stfodl**	SetFixedOutletDelay	ms	int	2	1	ro	Minimal delay between relay switch requests in milliseconds. The minimum delay is 100ms.
602	settings	**sthilt**	SetHighlight		int	1	1	ro	Locate a unit. Set to '1' to switch on and to '0' to switch off this function.
603	settings	**stledb**	SetLedBrightness	%	int	1	1	ro	LED brightness setting for the light ring of a PDU
604	settings	**stlock**	SetDisableOutletSwitching		int	1	1	ro	Setting this will disable all means of switching an outlet; only the powerup modes and delays will be respected (0 = disabled, 1 = enabled).
605	settings	**stopom**	SetOutletPowerupMode		int	1	1	ro	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.
606	settings	**stsnsa**	SetSensorChangeAlertMode		int	1	1	ro	Enables the sensor channel change detection. 0 = off (default). 1 = on
607	settings	**stusbm**	SetConfigUsbMode		int	1	1	ro	USB Mode. 0 = Disabled, 1 = Enabled
700	totals	**toaeng**	TotalApparentEnergy	VAh	float	4	1	ro	The total apparent energy in VAh. This value is not resetable.

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702	totals	**toapwr**	TotalApparentPower	VA	float	4	1	ro	Totals VA (volt-amps, in VA), sum of phases
704	totals	**tocrac**	TotalActualCurrent	A	float	4	1	ro	System total actual apparent, RMS current.
706	totals	**tocrpk**	TotalPeakCurrent	A	float	4	1	ro	System total peak apparent, RMS current; highest value since last reset of the peaks.
708	totals	**tokwht**	TotalEnergy	kWh	float	4	1	ro	Total energy measurement in kWh. This value is not resetable.
710	totals	**tonepk**	TotalNeutralPeak	A	float	4	1	ro	Peak neutral current.
712	totals	**toneut**	TotalNeutralCurrent	A	float	4	1	ro	Neutral current measurement. This is the sum of the neutral measurents channels: (only in three phase configs, one channel for all except 63A, then there will be two).
714	totals	**torcpk**	TotalResidualPeak	A	float	4	1	ro	Peak residual current.
716	totals	**torcsc**	TotalResidualCurrent	A	float	4	1	ro	Residual current measurement.
718	totals	**tordcc**	TotalResidualDcCurrent	A	float	4	1	ro	DC residual current measurement.
720	totals	**torpwr**	TotalActivePower	W	float	4	1	ro	Totals power (in W), sum of phases. power = current * voltage * powerfactor
722	totals	**toxpwr**	TotalReactivePower	VAR	float	4	1	ro	Totals reactive power (volt-amps reactive, in VAR), sum of phases. VAR = SQRT(SQR(VA) - SQR(W))
724	totals	**toracc**	TotalResidualAcCurrent	A	float	4	1	ro	AC residual current measurement.
3000	inputs	**inaeng**	InputApparentEnergy	VAh	float	4	3	ro	The apparent accumulated energy VAh of each phase
3006	inputs	**inapwr**	InputApparentPower	VA	float	4	3	ro	Input VA (volt-amps, in VA), MEASURED by the device using current and voltage measurements of a phase (phase is denoted by repeat/channel). VA = current * voltage
3012	inputs	**incfac**	InputCrestFactor		float	4	3	ro	The crest factor per input. the ratio of peak values to the effective value
3018	inputs	**incrac**	InputActualCurrent	A	float	4	3	ro	Actual apparent, RMS current of an input.
3024	inputs	**incrpk**	InputPeakCurrent	A	float	4	3	ro	Input peak apparent, RMS current; highest value since last reset of the peaks.
3030	inputs	**infreq**	InputFrequency	Hz	float	4	3	ro	Frequency in Hz per input.
3036	inputs	**inkwhs**	InputEnergySubtotal	kWh	float	4	3	ro	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].
3042	inputs	**inkwht**	InputEnergyTotal	kWh	float	4	3	ro	Either the only phase in a single phase measurement; or one of the three phases in a multiphase measurement. This value is not resetable.
3048	inputs	**inname**	InputName		string	64	3	ro	User configurable 64 character naming of the inputs or phases.
3144	inputs	**inpfac**	InputPowerFactor		float	4	3	ro	The effective power factor for each input.
3150	inputs	**inphse**	InputPhase		int	1	3	ro	A mapping to which phase each input is connected to
3153	inputs	**inrpwr**	InputActivePower	W	float	4	3	ro	Input power (in W), MEASURED by the device using current, voltage, and power factor measurements of a phase (phase is denoted by repeat/channel). power = current * voltage * powerfactor
3159	inputs	**inrtng**	InputMaxRatedAmps	A	float	4	3	ro	Maximum rated current in A per input.
3165	inputs	**inthdp**	InputTHD	%	float	4	3	ro	Total harmonic distortion in percent per phase
3171	inputs	**intype**	InputType		int	1	3	ro	Type of input, to be determined
3174	inputs	**invcal**	InputVoltCalibration	V	float	4	3	ro	Input calibration factor for voltage, per input, for use in endtest
3180	inputs	**invoac**	InputActualVoltage	V	float	4	3	ro	The actual voltage per input.
3186	inputs	**invodp**	InputMinVoltage	V	float	4	3	ro	RMS voltage dip; lowest value since reset of dips.
3192	inputs	**invopk**	InputMaxVoltage	V	float	4	3	ro	RMS voltage peak; highest value since reset of peaks.
3198	inputs	**inxpwr**	InputReactivePower	VAR	float	4	3	ro	Reactive power (volt-amps reactive, in VAR), MEASURED by the device (phase number is denoted by repeat/channel). VAR = SQRT(SQR(VA) - SQR(W))
4000	branches	**braeng**	BranchApparentEnergy	VAh	float	4	18	ro	The apparent accumulated energy VAh of each branch
4036	branches	**brapwr**	BranchApparentPower	VA	float	4	18	ro	Branch VA (volt-amps), MEASURED by the device using current and voltage measurements of an branch (branch number is denoted by repeat/channel). VA = current * voltage
4072	branches	**brcfac**	BranchCrestFactor		float	4	18	ro	The crest factor per branch. the ratio of peak values to the effective value

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4108	branches	**brcrac**	BranchActualCurrent	A	float	4	18	ro	Actual apparent, RMS current of a branch.
4144	branches	**brcrpk**	BranchPeakCurrent	A	float	4	18	ro	Peak apparent, RMS current of a branch; highest value since last reset of the peaks.
4180	branches	**brfreq**	BranchFrequency	Hz	float	4	18	ro	Frequency in Hz per branch.
4216	branches	**brkwhs**	BranchEnergySubtotal	kWh	float	4	18	ro	Branch energy subtotal measurement in kWh. Reset to zero with [rsbmks]. 24-bit little-endian integer.
4252	branches	**brkwht**	BranchEnergyTotal	kWh	float	4	18	ro	Branch energy total measurement in kWh. This value is not resetable. 24-bit little-endian integer.
4288	branches	**brname**	BranchName		string	64	18	ro	User configurable naming of a branch in 64 characters per branch. Always returns the values for all entries (= the number of repeats) regardless of PDU configuration.
4864	branches	**brpfac**	BranchPowerFactor		float	4	18	ro	The effective power factor per branch.
4900	branches	**brphse**	BranchPhase		int	1	18	ro	A mapping to which phase (input) each branch is connected to
4936	branches	**brrpwr**	BranchActivePower	W	float	4	18	ro	Branch power (in W), MEASURED by the device using current, voltage, and power factor measurements of an branch (branch number is denoted by repeat/channel). power = current * voltage * powerfactor.
4972	branches	**brrtng**	BranchMaxRatedAmps	A	float	4	18	ro	Maximum rated current in A per branch (representing the breakerfuse value). [changed mnemonic to match; was brmaxr]
5008	branches	**brstat**	BranchState		int	1	18	ro	Power state of the branch, usable for determining if a branch is currently tripped. 0 = OK, 1 = Tripped.
5026	branches	**brthdp**	BranchTHD	%	float	4	18	ro	Total harmonic distortion in percent per branch
5062	branches	**brtype**	BranchType		int	1	18	ro	Breaker type: 0: Unknown, 1: ETA (thermal, resettable), 2: HYMA (hydraulic magnetic), 3: MCB (thermal magnetic DIN), 4: MELT (small ceramic fuse), 5: REVOLVER (large ceramic fuse, DIN holder)
5098	branches	**brvoac**	BranchActualVoltage	V	float	4	18	ro	The actual voltage per branch.
5134	branches	**brvodp**	BranchMinVoltage	V	float	4	18	ro	RMS voltage dip per branch; lowest value since reset of dips.
5170	branches	**brvopk**	BranchMaxVoltage	V	float	4	18	ro	RMS voltage peak per branch; highest value since reset of peaks.
5206	branches	**brxpwr**	BranchReactivePower	VAR	float	4	18	ro	Reactive power (volt-amps reactive, in VAR) of a branch, MEASURED by the device (branch number is denoted by repeat/channel). VAR = SQRT(SQR(VA) - SQR(W))
6000	outlets	**olaeng**	OutletApparentEnergy	VAh	float	4	60	ro	The apparent accumulated energy VAh of each outlet
6120	outlets	**olapwr**	OutletApparentPower	VA	float	4	60	ro	Output VA (volt-amps, in VA), MEASURED by the device using current and voltage measurements of an outlet (outlet number is denoted by repeat/channel). VA = current * voltage .
6240	outlets	**olbrch**	OutletBranch		int	1	108	ro	A mapping to which branch each outlet is connected to
6348	outlets	**olcfac**	OutletCrestFactor		float	4	60	ro	The crest factor per outlet. the ratio of peak values to the effective value
6468	outlets	**olcrac**	OutletActualCurrent	A	float	4	60	ro	Actual apparent, RMS current per outlet.
6588	outlets	**olcrpk**	OutletPeakCurrent	A	float	4	60	ro	Peak apparent, RMS current of an outlet; highest value since last reset of the peaks.
6708	outlets	**olkwhs**	OutletEnergySubtotal	kWh	float	4	60	ro	kWh subtotal register of selected output. Reset to zero with [rsomks].
6828	outlets	**olkwht**	OutletEnergyTotal	kWh	float	4	60	ro	Total kWh of selected outlet. This value is not resetable.
6948	outlets	**olname**	OutletName		string	64	108	ro	User configurable naming of individual outlets.
10404	outlets	**olocst**	OutletCurrentState		int	1	60	ro	The state of the outlet relay(s)
10464	outlets	**olpcdl**	OutletPowerCycleDelay	seconds	int	1	60	ro	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.
10524	outlets	**olpfac**	OutletPowerFactor		float	4	60	ro	Power factor per outlet.
10644	outlets	**olphse**	OutletPhase		int	1	108	ro	A mapping to which input each outlet is connected to
10752	outlets	**olrpwr**	OutletActivePower	W	float	4	60	ro	Output power (in W), MEASURED by the device using current, voltage, and power factor measurements of an outlet (outlet number is denoted by repeat/channel). power = current * voltage * powerfactor
10872	outlets	**olrtng**	OutletMaxRatedAmps	A	float	4	108	ro	Maximum rated current in A per outlet.
11088	outlets	**olschd**	OutletScheduled		int	1	60	ro	The intended (externally set) state of an outlet. 0 = Relay open, 1 = Relay closed. See [olocst] for actual state.
11148	outlets	**olswdl**	OutletSwitchDelay	seconds	int	1	60	ro	Delay before an individual outlet's relay switches on at power-up, in seconds.

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11208	outlets	**olthdp**	OutletTHD	%	float	4	60	ro	Total harmonic distortion per outlet
11328	outlets	**oltype**	OutletType		int	1	108	ro	Outlet types: 0: Unknown, 1: BS, 2: C13, 3: C13 IEC Lock, 4: C19, 5: C19 IEC Lock, 6: CEE 16A 1 phase, 7: CEE 16A 3 phase, 8: CEE 32A 1 phase, 9: CEE 32A 3 phase, 10: CEE 63A 1 phase, 11: CEE 63A 3 phase, 12: COMBI IEC Lock, 13: GST 155, 14: GST 183, 15: GST 185, 16: Schuko, 17: T13, 18: T23, 19: UTE
11436	outlets	**olvoac**	OutletActualVoltage	V	float	4	60	ro	Actual voltage on outlet.
11556	outlets	**olxpwr**	OutletReactivePower	VAR	float	4	60	ro	Reactive power (volt-amps reactive, in VAR), MEASURED by the device (outlet number is denoted by repeat/channel). VAR = SQRT(SQR(VA) - SQR(W))
15000	sensors	**snindx**	SensorIndex		int	1	32	ro	Sensor index
15032	sensors	**snsnme**	SensorName		string	36	32	ro	User definable name for sensors.
16056	sensors	**snsril**	SensorSerialNumber		string	8	32	ro	Serial number
16200	sensors	**snstyp**	SensorType		int	1	32	ro	Returns the detected sensor type, can be: Temperature, Humidity, Dry Switch Contact, Output Switch
16232	sensors	**snsval**	SensorValue		float	4	32	ro	NOTE: RELAY in separate section; sensors only return measurements
16392	sensors	**snunit**	SensorUnit		int	1	32	ro	Sensor measurement unit