

1PH - DIGITAL POWER FACTOR

REGISTERS MODBUS - RTU:

READ REGISTERS (INPUT REGISTERS)

ADDRESS	FORMAT	MULTIPLIER	UNIT	PARAMETERS
0000	USHORT	0.001	-	Cosφ actual (x1000)
0001	USHORT	1	V	RMS Voltage
0002	ULONG	0.01	A	RMS Current
0004	LONG	1	VAR	Actual Reactive Power (Negative = Capacitive)
0006	LONG	1	VAR	Reactive Power Demand
0008	LONG	1	W	Actual Active Power
000A	USHORT	1	%	Actual THD
000B	USHORT	-	bits	General Alarms: (0 = Disabled, 1 = Enabled)
				bit0 = A.HU Voltage Too High
				bit1 = A.LU Voltage Too Low
				bit2 = A.HI Current Too High
				bit3 = A.LI Current Too Low
				bit4 = A.HC Over Compensation
				bit5 = A.LC Under Compensation
				bit6 = A.OT Over Temperature
				bit7 = A.Th High THD
				bit8 = A.Fr Wrong Frequency
				bit9 = A.CS Cosφ Min.
000C	USHORT	-	bits	Eeprom Alarms: (0 = Disabled, 1 = Enabled)
				bit0 = A.PS Error Parameters Setup
				bit1 = A.PC Calibration Error Parameters
				bit2 = A.PU Various Parameters Error
				bit3 = A.EE Eeprom Error Cancellation
				bit4 = A.SS Error Parameter Set
				bit5 = A.SC Not Used
				bit6 = A.SU Calibration Error
000D	USHORT	-	bits	Steps Actual Output Status
000E	ULONG	1	VAR	Real Reactive Power – Step 1
0010	ULONG	1	VAR	Real Reactive Power – Step 2
0012	ULONG	1	VAR	Real Reactive Power – Step 3
0014	ULONG	1	VAR	Real Reactive Power – Step 4
0016	ULONG	1	VAR	Real Reactive Power – Step 5
0018	ULONG	1	VAR	Real Reactive Power – Step 6
001A	ULONG	1	VAR	Real Reactive Power – Step 7
001C	ULONG	1	VAR	Real Reactive Power – Step 8
001E	ULONG	1	VAR	Real Reactive Power – Step 9
0020	ULONG	1	VAR	Real Reactive Power – Step 10
0022	ULONG	1	VAR	Real Reactive Power – Step 11
0024	ULONG	1	VAR	Real Reactive Power – Step 12
0026	USHORT	0.1	°C	Temperature
0027	USHORT	1	-	Max Step Number (04-06-08-12)
0028	USHORT	-	-	Firmware Checksum
0029	USHORT	-	-	Actual Quadrant (1 = IND-CAR, 2 = IND-GEN, 3 = CAP-GEN, 4 = CAP-CAR)
002A	USHORT	1	secs	Seconds of Discharge – Step 1
002B	USHORT	1	secs	Seconds of Discharge – Step 2
002C	USHORT	1	secs	Seconds of Discharge – Step 3
002D	USHORT	1	secs	Seconds of Discharge – Step 4
002E	USHORT	1	secs	Seconds of Discharge – Step 5
002F	USHORT	1	secs	Seconds of Discharge – Step 6
0030	USHORT	1	secs	Seconds of Discharge – Step 7
0031	USHORT	1	secs	Seconds of Discharge – Step 8
0032	USHORT	1	secs	Seconds of Discharge – Step 9
0033	USHORT	1	secs	Seconds of Discharge – Step 10
0034	USHORT	1	secs	Seconds of Discharge – Step 11
0035	USHORT	1	secs	Seconds of Discharge – Step 12
0036	ULONG	1	hrs	Total Hours of Operation
0038	USHORT	1	V	Maximum RMS Voltage Measured
0039	ULONG	0.01	A	Maximum RMS Current Measured
003B	USHORT	1	%	Maximum THD Measured
003C	USHORT	1	°C	Maximum Temperature Measured

READ / WRITE REGISTERS (HOLDING REGISTERS)

ADDRESS	FORMAT	MULTIPLIER	UNIT	RANGE	PARAMETERS
0000	USHORT	-	-	0 ... 1	Mode (0 = Manual, 1 = Auto)
0001	USHORT	-	-	0 ... 4095	Manual Step Combination Set (bit0 = Step 1, ... , bit11 = Step 12)
0002	SHORT	0.01	-	-100 ... 100	Cosφ desired (negative = capacitive)
0003	USHORT	1	secs/steps	5 ... 600	Sensitivity
0004	USHORT	1	A	0 / 5 ... 10000	P.01 CT Current
0005	USHORT	10	VAR	1 ... 30000	P.02 Minimum Step (limited, use 0X006C address for complete LONG data)
0006	USHORT	1	V	80 ... 30000	P.03 Nominal Capacitor Voltage
0007	USHORT	1	secs	1 ... 600	P.04 Reconnection Time Step
0008	LONG	1	VAR	0 ... 10000000	P.05 Step 1 Value
000A	LONG	1	VAR	0 ... 10000000	P.05 Step 2 Value
000C	LONG	1	VAR	-1 ... 10000000	P.05 Step 3 Value (if 04 steps: -1 = FAN)
000E	LONG	1	VAR	-2 ... 10000000	P.05 Step 4 Value (if 04 steps: -1 = NCA, -2 = NOA)
0010	LONG	1	VAR	-1 ... 10000000	P.05 Step 5 Value (if 06 steps: -1 = FAN)
0012	LONG	1	VAR	-2 ... 10000000	P.05 Step 6 Value (if 06 steps: -1 = NCA, -2 = NOA)
0014	LONG	1	VAR	-1 ... 10000000	P.05 Step 7 Value (if 08 steps: -1 = FAN)
0016	LONG	1	VAR	-2 ... 10000000	P.05 Step 8 Value (if 08 steps: -1 = NCA, -2 = NOA)
0018	LONG	1	VAR	0 ... 10000000	P.05 Step 9 Value
001A	LONG	1	VAR	0 ... 10000000	P.05 Step 10 Value
001C	LONG	1	VAR	-1 ... 10000000	P.05 Step 11 Value (if 12 steps: -1 = FAN)
001E	LONG	1	VAR	-2 ... 10000000	P.05 Step 12 Value (if 12 steps: -1 = NCA, -2 = NOA)
0020	USHORT	-	-	0 ... 1	R.01 Mains Connection (0 = Three-Phase, 1 = Single-Phase)
0021	USHORT	-	-	1 ... 6	R.02 Sense of CT current (1 = L1 Direct, 2 = L1 Inverse) (3 = L2 Direct, 4 = L2 Inverse) (5 = L3 Direct, 6 = L3 Inverse)
0022	USHORT	-	-	1 ... 2	R.03 Frequency (1 = 50Hz, 2 = 60Hz)
0023	USHORT	-	-	0 ... 247	R.04 Serial Address (0 = Off, 1...247 = On "address")
0024	USHORT	-	-	0 / 35 ... 158	R.05 Enable Temp. Alarm Relay (0 = Disable, 35...158 = Enabled)
0025	USHORT	-	-	0 ... 1	R.01 Temperature Scale (0 = °C, 1 = °F)
0026	USHORT	1	%	5 ... 200	R.07 THD Alarm Threshold
0027	USHORT	-	bits	0 ... 1023	R.09 Relay Alarm (0 = Disable, 1 = Enabled) (bit0 = R.HU , bit1 = R.LU , bit2 = R.HI , bit3 = R.LI , bit4 = R.HC) (bit5 = R.LC , bit6 = R.Dt , bit7 = R.tH , bit8 = not used, bit9 = R.CS)
0028	USHORT	-	units	1 ... 240	R.10 Delay Step Disconnection Warning (R.LI) (the unit of measure depends on parameter 0038)
0029	USHORT	1	°C	1 ... 240	R.11 Minimum Temperature Threshold for Disabling Fan Relay
002A	USHORT	1	°C	1 ... 240	R.12 Maximum Temperature Threshold for Activating Fan Relay
002B	USHORT	1	V	220 ... 440	R.13 Rated Voltage
002C	USHORT	-	-	0 ... 12	R.14 Fixed Step Number
002D	USHORT	-	-	0 ... 1	R.15 Fixed Step Type
002E	USHORT	-	-	0 ... 17	R.16 Serial Protocol Type
002F	USHORT	-	bits	0 ... 1023	Alarm Enable (0 = Disabled, 1 = Enabled) (bit0 = R.HU , bit1 = R.LU , bit2 = R.HI , bit3 = R.LI , bit4 = R.HC) (bit5 = R.LC , bit6 = R.Dt , bit7 = R.tH , bit8 = not used, bit9 = R.CS)
0030	USHORT	-	units	1 ... 240	R.HU Time Delay Alarm
0031	USHORT	-	units	1 ... 240	R.LU Time Delay Alarm
0032	USHORT	-	units	1 ... 240	R.HI Time Delay Alarm
0033	USHORT	-	units	1 ... 240	R.LI Time Delay Alarm
0034	USHORT	-	units	1 ... 240	R.HC Time Delay Alarm
0035	USHORT	-	units	1 ... 240	R.LC Time Delay Alarm
0036	USHORT	-	units	1 ... 240	R.Dt Time Delay Alarm
0037	USHORT	-	units	1 ... 600	R.tH Time Delay Alarm (R.DB)
0038	USHORT	-	bits	0 ... 1023	Alarm Scale (0 = Seconds, 1 = Minutes) (bit0 = R.HU , bit1 = R.LU , bit2 = R.HI , bit3 = R.LI , bit4 = R.HC) (bit5 = R.LC , bit6 = R.Dt , bit7 = R.tH , bit8 = not used, bit9 = R.CS)

0039	USHORT	-	bits	0 ... 1023	Disconnection Steps on Alarm (0 = Disabled, 1 = Enabled) (bit0 = A.HU , bit1 = A.LU , bit2 = A.HI , bit3 = A.LI , bit4 = A.HC) (bit5 = A.LC , bit6 = A.Dt , bit7 = A.tH , bit8 = not used, bit9 = A.CS)
003A	ULONG	1	-	0 ... 4294967295	Number Insertions Step 1
003C	ULONG	1	-	0 ... 4294967295	Number Insertions Step 2
003E	ULONG	1	-	0 ... 4294967295	Number Insertions Step 3
0040	ULONG	1	-	0 ... 4294967295	Number Insertions Step 4
0042	ULONG	1	-	0 ... 4294967295	Number Insertions Step 5
0044	ULONG	1	-	0 ... 4294967295	Number Insertions Step 6
0046	ULONG	1	-	0 ... 4294967295	Number Insertions Step 7
0048	ULONG	1	-	0 ... 4294967295	Number Insertions Step 8
004A	ULONG	1	-	0 ... 4294967295	Number Insertions Step 9
004C	ULONG	1	-	0 ... 4294967295	Number Insertions Step 10
004E	ULONG	1	-	0 ... 4294967295	Number Insertions Step 11
0050	ULONG	1	-	0 ... 4294967295	Number Insertions Step 12
0052	ULONG	1	secs	0 ... 4294967295	Time Insertion Step 1
0054	ULONG	1	secs	0 ... 4294967295	Time Insertion Step 2
0056	ULONG	1	secs	0 ... 4294967295	Time Insertion Step 3
0058	ULONG	1	secs	0 ... 4294967295	Time Insertion Step 4
005A	ULONG	1	secs	0 ... 4294967295	Time Insertion Step 5
005C	ULONG	1	secs	0 ... 4294967295	Time Insertion Step 6
005E	ULONG	1	secs	0 ... 4294967295	Time Insertion Step 7
0060	ULONG	1	secs	0 ... 4294967295	Time Insertion Step 8
0062	ULONG	1	secs	0 ... 4294967295	Time Insertion Step 9
0064	ULONG	1	secs	0 ... 4294967295	Time Insertion Step 10
0066	ULONG	1	secs	0 ... 4294967295	Time Insertion Step 11
0068	ULONG	1	secs	0 ... 4294967295	Time Insertion Step 12
006A	USHORT	0.01	-	-095 ... 090	A. 17 Anti-Hunting threshold (negative = capacitive)
006B	USHORT	0.01	-	40 ... 10000	P.06 Voltage Transformer Ratio
006C	ULONG	1	VAR	1 ... 10000000	P.02 Minimum Step
006E	USHORT	0.01	-	50 ... 95	A. 18 Threshold Minimum Cosφ Alarm
006F	USHORT	1	units	1 ... 240	A.C5 Time Delay Alarm
0070	USHORT	0.1	secs	10 ... 50	A. 19 Delay Between Steps

Available optional communication module PC-USB / RS485 / TTL

Order Code: SCUSB485