



SRD100-D1 register list

(0x0000)

Communication settings

Register name	Register address	Register type	Register access	Register description	Enumeration	Default value	Persistent	Unit
device address	0x0000	u16	RW	The modbus device address of the instrument. Valid addresses range from 1 to 247. A reboot (hard or soft) is required to apply the settings.	N/A	1	True	Undefined
serial baud rate	0x0001	u16	RW	Serial baudrate / 100. Supported baudrates are 9600, 19200, 38400 and 115200. A reboot (hard or soft) is required to apply the settings.	N/A	192	True	Undefined
serial baud parity	0x0002	u16	RW	Parity bit setting for serial communication. A reboot (hard or soft) is required to apply the settings.	0: no parity 1: odd parity 2: even parity	2	True	Undefined
serial baud stop bits	0x0003	u16	RW	Number of stop bits for serial communication. A reboot (hard or soft) is required to apply the settings.	1: one stop bit 2: two stop bits	1	True	Undefined

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SRD100-D1 register list

(0x0080)

Identification

Register name	Register address	Register type	Register access	Register description	Enumeration	Default value	Persistent	Unit
product model	0x0080	string32	R-	Product model string.	N/A	N/A	True	Undefined
product type	0x0090	string32	R-	Product type identification.	N/A	N/A	True	Undefined
serial number	0x00a0	string32	R-	Serial number of the instrument.	N/A	N/A	True	Undefined
firmware version	0x00b0	string32	R-	Firmware version.	N/A	N/A	False	Undefined
product version	0x00c0	string32	R-	Product version.	N/A	N/A	False	Undefined
pcb serial number 1	0x0100	string32	R-	Serial number of pcb 1.	N/A	N/A	True	Undefined
pcb serial number 2	0x0110	string32	R-	Serial number of pcb 2.	N/A	N/A	True	Undefined
pcb serial number 3	0x0120	string32	R-	Serial number of pcb 3.	N/A	N/A	True	Undefined
customer serial number	0x01a0	string32	R-	Customer serial number.	N/A	N/A	True	Undefined

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SRD100-D1 register list

(0x0200)

Diffuse irradiance

Register name	Register address	Register type	Register access	Register description	Enumeration	Default value	Persistent	Unit
temperature compensated diffuse irradiance	0x0200	float	R-	Temperature compensated diffuse irradiance in W/m ² .	N/A	N/A	False	W/m ²
instrument temperature	0x0202	float	R-	Instrument temperature in °C.	N/A	N/A	False	W/m ²
compensated diffuse irradiance stats	0x0220	statistic	R-	Statistic values for temperature compensated diffuse irradiance signal: min, max, avg, std. Reset accumulation on read.	N/A	N/A	False	W/m ²
temperature stats	0x0228	statistic	R-	Statistic values for temperature signal: min, max, avg, std. Reset accumulation on read.	N/A	N/A	False	W/m ²



SRD100-D1 register list

(0x0280)

Detector array raw signals

Register name	Register address	Register type	Register access	Register description	Enumeration	Default value	Persistent	Unit
raw adc word 1 1	0x0280	i32	R-	Raw ADC word for channel (1,1).	N/A	N/A	False	LSB
raw adc word 1 2	0x0282	i32	R-	Raw ADC word for channel (1,2).	N/A	N/A	False	LSB
raw adc word 1 3	0x0284	i32	R-	Raw ADC word for channel (1,3).	N/A	N/A	False	LSB
raw adc word 2 1	0x0286	i32	R-	Raw ADC word for channel (2,1).	N/A	N/A	False	LSB
raw adc word 2 2	0x0288	i32	R-	Raw ADC word for channel (2,2).	N/A	N/A	False	LSB
raw adc word 2 3	0x028a	i32	R-	Raw ADC word for channel (2,3).	N/A	N/A	False	LSB
raw adc word 3 1	0x028c	i32	R-	Raw ADC word for channel (3,1).	N/A	N/A	False	LSB
raw adc word 3 2	0x028e	i32	R-	Raw ADC word for channel (3,2).	N/A	N/A	False	LSB
raw adc word 3 3	0x0290	i32	R-	Raw ADC word for channel (3,3).	N/A	N/A	False	LSB
detector output voltage 1 1	0x02a0	float	R-	Voltage output from detector (1,1) ((raw_adc_word_1_1 - raw_offset) * voltage_calibration_factor)).	N/A	N/A	False	V
detector output voltage 1 2	0x02a2	float	R-	Voltage output from detector (1,2) ((raw_adc_word_1_2 - raw_offset) * voltage_calibration_factor)).	N/A	N/A	False	V



SRD100-D1 register list

(0x0280)

Detector array raw signals

Register name	Register address	Register type	Register access	Register description	Enumeration	Default value	Persistent	Unit
detector output voltage 1 3	0x02a4	float	R-	Voltage output from detector (1,3) $((\text{raw_adc_word_1_3} - \text{raw_offset}) * \text{voltage calibration factor})$.	N/A	N/A	False	V
detector output voltage 2 1	0x02a6	float	R-	Voltage output from detector (2,1) $((\text{raw_adc_word_2_1} - \text{raw_offset}) * \text{voltage calibration factor})$.	N/A	N/A	False	V
detector output voltage 2 2	0x02a8	float	R-	Voltage output from detector (2,2) $((\text{raw_adc_word_2_2} - \text{raw_offset}) * \text{voltage calibration factor})$.	N/A	N/A	False	V
detector output voltage 2 3	0x02aa	float	R-	Voltage output from detector (2,3) $((\text{raw_adc_word_2_3} - \text{raw_offset}) * \text{voltage calibration factor})$.	N/A	N/A	False	V
detector output voltage 3 1	0x02ac	float	R-	Voltage output from detector (3,1) $((\text{raw_adc_word_3_1} - \text{raw_offset}) * \text{voltage calibration factor})$.	N/A	N/A	False	V
detector output voltage 3 2	0x02ae	float	R-	Voltage output from detector (3,2) $((\text{raw_adc_word_3_2} - \text{raw_offset}) * \text{voltage calibration factor})$.	N/A	N/A	False	V



SRD100-D1 register list

(0x0280)

Detector array raw signals

Register name	Register address	Register type	Register access	Register description	Enumeration	Default value	Persistent	Unit
detector output voltage 3 3	0x02b0	float	R-	Voltage output from detector (3,3) $((\text{raw_adc_word_3_3} - \text{raw_offset}) * \text{voltage_calibration_factor})$.	N/A	N/A	False	V
offset voltage	0x02b2	float	R-	Measured offset voltage in V. This value is subtracted from the detector signals.	N/A	N/A	False	V
temperature compensated detector output voltage 1 1	0x02b4	float	R-	Temperature compensated output voltage from detector (1,1) $((\text{raw_adc_word_1_1} - \text{raw_offset}) * \text{voltage_calibration_factor}) / (A(T-T_0)^2 + B(T-T_0) + 1))$.	N/A	N/A	False	V
temperature compensated detector output voltage 1 2	0x02b6	float	R-	Temperature compensated output voltage from detector (1,2) $((\text{raw_adc_word_1_2} - \text{raw_offset}) * \text{voltage_calibration_factor}) / (A(T-T_0)^2 + B(T-T_0) + 1))$.	N/A	N/A	False	V
temperature compensated detector output voltage 1 3	0x02b8	float	R-	Temperature compensated output voltage from detector (1,3) $((\text{raw_adc_word_1_3} - \text{raw_offset}) * \text{voltage_calibration_factor}) / (A(T-T_0)^2 + B(T-T_0) + 1))$.	N/A	N/A	False	V

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SRD100-D1 register list

(0x0280)

Detector array raw signals

Register name	Register address	Register type	Register access	Register description	Enumeration	Default value	Persistent	Unit
temperature compensated detector output voltage 2 1	0x02ba	float	R-	Temperature compensated output voltage from detector (2,1) $((\text{raw_adc_word_2_1} - \text{raw_offset}) * \text{voltage_calibration_factor}) / (A(T-T_0)^2 + B(T-T_0) + 1))$.	N/A	N/A	False	V
temperature compensated detector output voltage 2 2	0x02bc	float	R-	Temperature compensated output voltage from detector (2,2) $((\text{raw_adc_word_2_2} - \text{raw_offset}) * \text{voltage_calibration_factor}) / (A(T-T_0)^2 + B(T-T_0) + 1))$.	N/A	N/A	False	V
temperature compensated detector output voltage 2 3	0x02be	float	R-	Temperature compensated output voltage from detector (2,3) $((\text{raw_adc_word_2_3} - \text{raw_offset}) * \text{voltage_calibration_factor}) / (A(T-T_0)^2 + B(T-T_0) + 1))$.	N/A	N/A	False	V
temperature compensated detector output voltage 3 1	0x02c0	float	R-	Temperature compensated output voltage from detector (3,1) $((\text{raw_adc_word_3_1} - \text{raw_offset}) * \text{voltage_calibration_factor}) / (A(T-T_0)^2 + B(T-T_0) + 1))$.	N/A	N/A	False	V



SRD100-D1 register list

(0x0280)

Detector array raw signals

Register name	Register address	Register type	Register access	Register description	Enumeration	Default value	Persistent	Unit
temperature compensated detector output voltage 3 2	0x02c2	float	R-	Temperature compensated output voltage from detector (3,2) $((\text{raw_adc_word_3_2} - \text{raw_offset}) * \text{voltage_calibration_factor}) / (A(T-T_0)^2 + B(T-T_0) + 1))$.	N/A	N/A	False	V
temperature compensated detector output voltage 3 3	0x02c4	float	R-	Temperature compensated output voltage from detector (3,3) $((\text{raw_adc_word_3_3} - \text{raw_offset}) * \text{voltage_calibration_factor}) / (A(T-T_0)^2 + B(T-T_0) + 1))$.	N/A	N/A	False	V



SRD100-D1 register list

(0x0300)

Diffuse irradiance calibration

Register name	Register address	Register type	Register access	Register description	Enumeration	Default value	Persistent	Unit
diffuse irradiance sensitivity 1 1	0x0300	float	RW	Sensitivity of detector (1,1) to diffuse irradiance, in $V/(W/m^2)$, at 20 °C, only persistent after the store_irradiance_calibration boolean is set	N/A	N/A	True	$V/(W/m^2)$
diffuse irradiance sensitivity 1 2	0x0302	float	RW	Sensitivity of detector (1,2) to diffuse irradiance, in $V/(W/m^2)$, at 20 °C, only persistent after the store_irradiance_calibration boolean is set	N/A	N/A	True	$V/(W/m^2)$
diffuse irradiance sensitivity 1 3	0x0304	float	RW	Sensitivity of detector (1,3) to diffuse irradiance, in $V/(W/m^2)$, at 20 °C, only persistent after the store_irradiance_calibration boolean is set	N/A	N/A	True	$V/(W/m^2)$
diffuse irradiance sensitivity 2 1	0x0306	float	RW	Sensitivity of detector (2,1) to diffuse irradiance, in $V/(W/m^2)$, at 20 °C, only persistent after the store_irradiance_calibration boolean is set	N/A	N/A	False	$V/(W/m^2)$



SRD100-D1 register list

(0x0300)

Diffuse irradiance calibration

Register name	Register address	Register type	Register access	Register description	Enumeration	Default value	Persistent	Unit
diffuse irradiance sensitivity 2 2	0x0308	float	RW	Sensitivity of detector (2,2) to diffuse irradiance, in $V/(W/m^2)$, at 20 °C, only persistent after the store_irradiance_calibration boolean is set	N/A	N/A	True	$V/(W/m^2)$
diffuse irradiance sensitivity 2 3	0x030a	float	RW	Sensitivity of detector (2,3) to diffuse irradiance, in $V/(W/m^2)$, at 20 °C, only persistent after the store_irradiance_calibration boolean is set	N/A	N/A	True	$V/(W/m^2)$
diffuse irradiance sensitivity 3 1	0x030c	float	RW	Sensitivity of detector (3,1) to diffuse irradiance, in $V/(W/m^2)$, at 20 °C, only persistent after the store_irradiance_calibration boolean is set	N/A	N/A	True	$V/(W/m^2)$
diffuse irradiance sensitivity 3 2	0x030e	float	RW	Sensitivity of detector (3,2) to diffuse irradiance, in $V/(W/m^2)$, at 20 °C, only persistent after the store_irradiance_calibration boolean is set	N/A	N/A	True	$V/(W/m^2)$



SRD100-D1 register list

(0x0300)

Diffuse irradiance calibration

Register name	Register address	Register type	Register access	Register description	Enumeration	Default value	Persistent	Unit
diffuse irradiance sensitivity 3 3	0x0310	float	RW	Sensitivity of detector (3,3) to diffuse irradiance, in V/(W/m ²), at 20 °C, only persistent after the store_irradiance_calibration boolean is set	N/A	N/A	True	V/(W/m ²)
diffuse irradiance calibration date	0x0312	u64	RW	Calibration date, as uint32 timestamp, only persistent after the store_irradiance_calibration boolean is set. Decimal formatting: 00yyyymmss. Optionally, a 64-bit Unix POSIX.1-2017 timestamp may be used in the future. Example: 18-03-2022 16:25 would be stored as 0020220318 (time part is not stored)	N/A	N/A	True	Undefined
diffuse irradiance traceability	0x0316	u16	RW	Irradiance calibration traceability register, usage not determined as of yet 0: WRR (1977)	N/A	N/A	True	Undefined
voltage calibration factor	0x031a	float	R-	Voltage calibration factor in V / LSB	N/A	N/A	True	V/LSB



SRD100-D1 register list

(0x0300)

Diffuse irradiance calibration

Register name	Register address	Register type	Register access	Register description	Enumeration	Default value	Persistent	Unit
diffuse irradiance temperature compensation a	0x031c	float	R-	The second order temperature coefficient of the sensitivity at 20 °C in $(^{\circ}\text{C})^{(-2)}$, i.e. the coefficient of the quadratic term.	N/A	N/A	True	$1/(^{\circ}\text{C}^2)$
diffuse irradiance temperature compensation b	0x031e	float	R-	The first order temperature coefficient of the sensitivity at 20 °C in $(^{\circ}\text{C})^{(-1)}$, i.e. the coefficient of the linear term.	N/A	N/A	True	$1/^{\circ}\text{C}$
store diffuse irradiance calibration	0x0320	bool	RW	When the 'true' value is written, the irradiance_sensitivity, irradiance_calibration_date and irradiance traceability registers are stored persistently. Will always read back as 'false'. Note: This is a slow operation, and can take up to a second!	N/A	N/A	False	Undefined
diffuse irradiance sensitivity 1 1 history 1	0x0330	float	R-	Read only. Automatically updated when store_irradiance_calibration flag is set. Cleared when clear_calibration_history flag is set.	N/A	N/A	True	$\text{V}/(\text{W}/\text{m}^2)$



SRD100-D1 register list

(0x0300)

Diffuse irradiance calibration

Register name	Register address	Register type	Register access	Register description	Enumeration	Default value	Persistent	Unit
diffuse irradiance sensitivity 1 2 history 1	0x0332	float	R-	Read only. Automatically updated when store_irradiance_calibration flag is set. Cleared when clear_calibration_history flag is set.	N/A	N/A	True	V/(W/m ²)
diffuse irradiance sensitivity 1 3 history 1	0x0334	float	R-	Read only. Automatically updated when store_irradiance_calibration flag is set. Cleared when clear_calibration_history flag is set.	N/A	N/A	True	V/(W/m ²)
diffuse irradiance sensitivity 2 1 history 1	0x0336	float	R-	Read only. Automatically updated when store_irradiance_calibration flag is set. Cleared when clear_calibration_history flag is set.	N/A	N/A	True	V/(W/m ²)
diffuse irradiance sensitivity 2 2 history 1	0x0338	float	R-	Read only. Automatically updated when store_irradiance_calibration flag is set. Cleared when clear_calibration_history flag is set.	N/A	N/A	True	V/(W/m ²)



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(0x0300)

Diffuse irradiance calibration

Register name	Register address	Register type	Register access	Register description	Enumeration	Default value	Persistent	Unit
diffuse irradiance sensitivity 2 3 history 1	0x033a	float	R-	Read only. Automatically updated when store_irradiance_calibration flag is set. Cleared when clear_calibration_history flag is set.	N/A	N/A	True	V/(W/m ²)
diffuse irradiance sensitivity 3 1 history 1	0x033c	float	R-	Read only. Automatically updated when store_irradiance_calibration flag is set. Cleared when clear_calibration_history flag is set.	N/A	N/A	True	V/(W/m ²)
diffuse irradiance sensitivity 3 2 history 1	0x033e	float	R-	Read only. Automatically updated when store_irradiance_calibration flag is set. Cleared when clear_calibration_history flag is set.	N/A	N/A	True	V/(W/m ²)
diffuse irradiance sensitivity 3 3 history 1	0x0340	float	R-	Read only. Automatically updated when store_irradiance_calibration flag is set. Cleared when clear_calibration_history flag is set.	N/A	N/A	True	V/(W/m ²)

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SRD100-D1 register list

(0x0300)

Diffuse irradiance calibration

Register name	Register address	Register type	Register access	Register description	Enumeration	Default value	Persistent	Unit
diffuse irradiance calibration date history 1	0x0342	u64	R-	Read only. Automatically updated when store_irradiance_calibration flag is set. Cleared when clear_calibration_history flag is set.	N/A	N/A	True	Undefined
diffuse irradiance calibration traceability history 1	0x0346	u16	R-	Read only. Automatically updated when store_irradiance_calibration flag is set. Cleared when clear_calibration_history flag is set.	N/A	N/A	True	Undefined
diffuse irradiance sensitivity 1 1 history 2	0x034a	float	R-	Read only. Automatically updated when store_diffuse_irradiance_calibration flag is set. Cleared when clear_diffuse_irradiance_calibration_history flag is set.	N/A	N/A	True	V/(W/m ²)
diffuse irradiance sensitivity 1 2 history 2	0x034c	float	R-	Read only. Automatically updated when store_diffuse_irradiance_calibration flag is set. Cleared when clear_calibration_history flag is set.	N/A	N/A	True	V/(W/m ²)



SRD100-D1 register list

(0x0300)

Diffuse irradiance calibration

Register name	Register address	Register type	Register access	Register description	Enumeration	Default value	Persistent	Unit
diffuse irradiance sensitivity 1 3 history 2	0x034e	float	R-	Read only. Automatically updated when store_diffuse_irradiance_calibration flag is set. Cleared when clear_diffuse_irradiance_calibration_history flag is set.	N/A	N/A	True	V/(W/m ²)
diffuse irradiance sensitivity 2 1 history 2	0x0350	float	R-	Read only. Automatically updated when store_diffuse_irradiance_calibration flag is set. Cleared when clear_diffuse_irradiance_calibration_history flag is set.	N/A	N/A	True	V/(W/m ²)
diffuse irradiance sensitivity 2 2 history 2	0x0352	float	R-	Read only. Automatically updated when store_diffuse_irradiance_calibration flag is set. Cleared when clear_diffuse_irradiance_calibration_history flag is set.	N/A	N/A	True	V/(W/m ²)



SRD100-D1 register list

(0x0300)

Diffuse irradiance calibration

Register name	Register address	Register type	Register access	Register description	Enumeration	Default value	Persistent	Unit
diffuse irradiance sensitivity 2 3 history 2	0x0354	float	R-	Read only. Automatically updated when store_diffuse_irradiance_calibration flag is set. Cleared when clear_diffuse_irradiance_calibration_history flag is set.	N/A	N/A	True	V/(W/m ²)
diffuse irradiance sensitivity 3 1 history 2	0x0356	float	R-	Read only. Automatically updated when store_diffuse_irradiance_calibration flag is set. Cleared when clear_diffuse_irradiance_calibration_history flag is set.	N/A	N/A	True	V/(W/m ²)
diffuse irradiance sensitivity 3 2 history 2	0x0358	float	R-	Read only. Automatically updated when store_diffuse_irradiance_calibration flag is set. Cleared when clear_diffuse_irradiance_calibration_history flag is set.	N/A	N/A	True	V/(W/m ²)



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(0x0300)

Diffuse irradiance calibration

Register name	Register address	Register type	Register access	Register description	Enumeration	Default value	Persistent	Unit
diffuse irradiance sensitivity 3 3 history 2	0x035a	float	R-	Read only. Automatically updated when store_diffuse_irradiance_calibration flag is set. Cleared when clear_diffuse_irradiance_calibration_history flag is set.	N/A	N/A	True	V/(W/m ²)
diffuse irradiance calibration date history 2	0x035c	u64	R-	Read only. Automatically updated when store_diffuse_irradiance_calibration flag is set. Cleared when clear_diffuse_irradiance_calibration_history flag is set.	N/A	N/A	True	Undefined
diffuse irradiance calibration traceability history 2	0x0360	u16	R-	Read only. Automatically updated when store_diffuse_irradiance_calibration flag is set. Cleared when clear_diffuse_irradiance_calibration_history flag is set.	N/A	N/A	True	Undefined



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(0x0300)

Diffuse irradiance calibration

Register name	Register address	Register type	Register access	Register description	Enumeration	Default value	Persistent	Unit
diffuse irradiance sensitivity 1 1 history 3	0x0364	float	R-	Read only. Automatically updated when store_diffuse_irradiance_calibration flag is set. Cleared when clear_diffuse_irradiance_calibration_history flag is set.	N/A	N/A	True	V/(W/m ²)
diffuse irradiance sensitivity 1 2 history 3	0x0366	float	R-	Read only. Automatically updated when store_diffuse_irradiance_calibration flag is set. Cleared when clear_diffuse_irradiance_calibration_history flag is set.	N/A	N/A	True	V/(W/m ²)
diffuse irradiance sensitivity 1 3 history 3	0x0368	float	R-	Read only. Automatically updated when store_diffuse_irradiance_calibration flag is set. Cleared when clear_diffuse_irradiance_calibration_history flag is set.	N/A	N/A	True	V/(W/m ²)



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(0x0300)

Diffuse irradiance calibration

Register name	Register address	Register type	Register access	Register description	Enumeration	Default value	Persistent	Unit
diffuse irradiance sensitivity 2 1 history 3	0x036a	float	R-	Read only. Automatically updated when store_diffuse_irradiance_calibration flag is set. Cleared when clear_diffuse_irradiance_calibration_history flag is set.	N/A	N/A	True	V/(W/m ²)
diffuse irradiance sensitivity 2 2 history 3	0x036c	float	R-	Read only. Automatically updated when store_diffuse_irradiance_calibration flag is set. Cleared when clear_diffuse_irradiance_calibration_history flag is set.	N/A	N/A	True	V/(W/m ²)
diffuse irradiance sensitivity 2 3 history 3	0x036e	float	R-	Read only. Automatically updated when store_diffuse_irradiance_calibration flag is set. Cleared when clear_diffuse_irradiance_calibration_history flag is set.	N/A	N/A	True	V/(W/m ²)



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(0x0300)

Diffuse irradiance calibration

Register name	Register address	Register type	Register access	Register description	Enumeration	Default value	Persistent	Unit
diffuse irradiance sensitivity 3 1 history 3	0x0370	float	R-	Read only. Automatically updated when store_diffuse_irradiance_calibration flag is set. Cleared when clear_diffuse_irradiance_calibration_history flag is set.	N/A	N/A	True	V/(W/m ²)
diffuse irradiance sensitivity 3 2 history 3	0x0372	float	R-	Read only. Automatically updated when store_diffuse_irradiance_calibration flag is set. Cleared when clear_diffuse_irradiance_calibration_history flag is set.	N/A	N/A	True	V/(W/m ²)
diffuse irradiance sensitivity 3 3 history 3	0x0374	float	R-	Read only. Automatically updated when store_diffuse_irradiance_calibration flag is set. Cleared when clear_diffuse_irradiance_calibration_history flag is set.	N/A	N/A	True	V/(W/m ²)



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(0x0300)

Diffuse irradiance calibration

Register name	Register address	Register type	Register access	Register description	Enumeration	Default value	Persistent	Unit
diffuse irradiance calibration date history 3	0x0376	u64	R-	Read only. Automatically updated when store_diffuse_irradiance_calibration flag is set. Cleared when clear_diffuse_irradiance_calibration_history flag is set.	N/A	N/A	True	Undefined
diffuse irradiance calibration traceability history 3	0x037a	u16	R-	Read only. Automatically updated when store_diffuse_irradiance_calibration flag is set. Cleared when clear_diffuse_irradiance_calibration_history flag is set.	N/A	N/A	True	Undefined
diffuse irradiance sensitivity 1 1 history 4	0x037e	float	R-	Read only. Automatically updated when store_diffuse_irradiance_calibration flag is set. Cleared when clear_diffuse_irradiance_calibration_history flag is set.	N/A	N/A	True	V/(W/m ²)



SRD100-D1 register list

(0x0300)

Diffuse irradiance calibration

Register name	Register address	Register type	Register access	Register description	Enumeration	Default value	Persistent	Unit
diffuse irradiance sensitivity 1 2 history 4	0x0380	float	R-	Read only. Automatically updated when store_diffuse_irradiance_calibration flag is set. Cleared when clear_diffuse_irradiance_calibration_history flag is set.	N/A	N/A	True	V/(W/m ²)
diffuse irradiance sensitivity 1 3 history 4	0x0382	float	R-	Read only. Automatically updated when store_diffuse_irradiance_calibration flag is set. Cleared when clear_diffuse_irradiance_calibration_history flag is set.	N/A	N/A	True	V/(W/m ²)
diffuse irradiance sensitivity 2 1 history 4	0x0384	float	R-	Read only. Automatically updated when store_diffuse_irradiance_calibration flag is set. Cleared when clear_diffuse_irradiance_calibration_history flag is set.	N/A	N/A	True	V/(W/m ²)



SRD100-D1 register list

(0x0300)

Diffuse irradiance calibration

Register name	Register address	Register type	Register access	Register description	Enumeration	Default value	Persistent	Unit
diffuse irradiance sensitivity 2 2 history 4	0x0386	float	R-	Read only. Automatically updated when store_diffuse_irradiance_calibration flag is set. Cleared when clear_diffuse_irradiance_calibration_history flag is set.	N/A	N/A	True	V/(W/m ²)
diffuse irradiance sensitivity 2 3 history 4	0x0388	float	R-	Read only. Automatically updated when store_diffuse_irradiance_calibration flag is set. Cleared when clear_diffuse_irradiance_calibration_history flag is set.	N/A	N/A	True	V/(W/m ²)
diffuse irradiance sensitivity 3 1 history 4	0x038a	float	R-	Read only. Automatically updated when store_diffuse_irradiance_calibration flag is set. Cleared when clear_diffuse_irradiance_calibration_history flag is set.	N/A	N/A	True	V/(W/m ²)



SRD100-D1 register list

(0x0300)

Diffuse irradiance calibration

Register name	Register address	Register type	Register access	Register description	Enumeration	Default value	Persistent	Unit
diffuse irradiance sensitivity 3 2 history 4	0x038c	float	R-	Read only. Automatically updated when store_diffuse_irradiance_calibration flag is set. Cleared when clear_diffuse_irradiance_calibration_history flag is set.	N/A	N/A	True	V/(W/m ²)
diffuse irradiance sensitivity 3 3 history 4	0x038e	float	R-	Read only. Automatically updated when store_diffuse_irradiance_calibration flag is set. Cleared when clear_diffuse_irradiance_calibration_history flag is set.	N/A	N/A	True	V/(W/m ²)
diffuse irradiance calibration date history 4	0x0390	u64	R-	Read only. Automatically updated when store_diffuse_irradiance_calibration flag is set. Cleared when clear_diffuse_irradiance_calibration_history flag is set.	N/A	N/A	True	Undefined



SRD100-D1 register list

(0x0300)

Diffuse irradiance calibration

Register name	Register address	Register type	Register access	Register description	Enumeration	Default value	Persistent	Unit
diffuse irradiance calibration traceability history 4	0x0394	u16	R-	Read only. Automatically updated when store_diffuse_irradiance_calibration flag is set. Cleared when clear_diffuse_irradiance_calibration_history flag is set.	N/A	N/A	True	Undefined
diffuse irradiance sensitivity 1 1 history 5	0x0398	float	R-	Read only. Automatically updated when store_diffuse_irradiance_calibration flag is set. Cleared when clear_diffuse_irradiance_calibration_history flag is set.	N/A	N/A	True	V/(W/m ²)
diffuse irradiance sensitivity 1 2 history 5	0x039a	float	R-	Read only. Automatically updated when store_diffuse_irradiance_calibration flag is set. Cleared when clear_diffuse_irradiance_calibration_history flag is set.	N/A	N/A	True	V/(W/m ²)



SRD100-D1 register list

(0x0300)

Diffuse irradiance calibration

Register name	Register address	Register type	Register access	Register description	Enumeration	Default value	Persistent	Unit
diffuse irradiance sensitivity 1 3 history 5	0x039c	float	R-	Read only. Automatically updated when store_diffuse_irradiance_calibration flag is set. Cleared when clear_diffuse_irradiance_calibration_history flag is set.	N/A	N/A	True	V/(W/m ²)
diffuse irradiance sensitivity 2 1 history 5	0x039e	float	R-	Read only. Automatically updated when store_diffuse_irradiance_calibration flag is set. Cleared when clear_diffuse_irradiance_calibration_history flag is set.	N/A	N/A	True	V/(W/m ²)
diffuse irradiance sensitivity 2 2 history 5	0x03a0	float	R-	Read only. Automatically updated when store_diffuse_irradiance_calibration flag is set. Cleared when clear_diffuse_irradiance_calibration_history flag is set.	N/A	N/A	True	V/(W/m ²)



SRD100-D1 register list

(0x0300)

Diffuse irradiance calibration

Register name	Register address	Register type	Register access	Register description	Enumeration	Default value	Persistent	Unit
diffuse irradiance sensitivity 2 3 history 5	0x03a2	float	R-	Read only. Automatically updated when store_diffuse_irradiance_calibration flag is set. Cleared when clear_diffuse_irradiance_calibration_history flag is set.	N/A	N/A	True	V/(W/m ²)
diffuse irradiance sensitivity 3 1 history 5	0x03a4	float	R-	Read only. Automatically updated when store_diffuse_irradiance_calibration flag is set. Cleared when clear_diffuse_irradiance_calibration_history flag is set.	N/A	N/A	True	V/(W/m ²)
diffuse irradiance sensitivity 3 2 history 5	0x03a6	float	R-	Read only. Automatically updated when store_diffuse_irradiance_calibration flag is set. Cleared when clear_diffuse_irradiance_calibration_history flag is set.	N/A	N/A	True	V/(W/m ²)



SRD100-D1 register list

(0x0300)

Diffuse irradiance calibration

Register name	Register address	Register type	Register access	Register description	Enumeration	Default value	Persistent	Unit
diffuse irradiance sensitivity 3 3 history 5	0x03a8	float	R-	Read only. Automatically updated when store_diffuse_irradiance_calibration flag is set. Cleared when clear_diffuse_irradiance_calibration_history flag is set.	N/A	N/A	True	V/(W/m ²)
diffuse irradiance calibration date history 5	0x03aa	u64	R-	Read only. Automatically updated when store_diffuse_irradiance_calibration flag is set. Cleared when clear_diffuse_irradiance_calibration_history flag is set.	N/A	N/A	True	Undefined
diffuse irradiance calibration traceability history 5	0x03ae	u16	R-	Read only. Automatically updated when store_diffuse_irradiance_calibration flag is set. Cleared when clear_diffuse_irradiance_calibration_history flag is set.	N/A	N/A	True	Undefined



SRD100-D1 register list

(0x0300)

Diffuse irradiance calibration

Register name	Register address	Register type	Register access	Register description	Enumeration	Default value	Persistent	Unit
diffuse irradiance sensitivity 1 1 history 6	0x03b2	float	R-	Read only. Automatically updated when store_diffuse_irradiance_calibration flag is set. Cleared when clear_diffuse_irradiance_calibration_history flag is set.	N/A	N/A	True	V/(W/m ²)
diffuse irradiance sensitivity 1 2 history 6	0x03b4	float	R-	Read only. Automatically updated when store_diffuse_irradiance_calibration flag is set. Cleared when clear_diffuse_irradiance_calibration_history flag is set.	N/A	N/A	True	V/(W/m ²)
diffuse irradiance sensitivity 1 3 history 6	0x03b6	float	R-	Read only. Automatically updated when store_diffuse_irradiance_calibration flag is set. Cleared when clear_diffuse_irradiance_calibration_history flag is set.	N/A	N/A	True	V/(W/m ²)



SRD100-D1 register list

(0x0300)

Diffuse irradiance calibration

Register name	Register address	Register type	Register access	Register description	Enumeration	Default value	Persistent	Unit
diffuse irradiance sensitivity 2 1 history 6	0x03b8	float	R-	Read only. Automatically updated when store_diffuse_irradiance_calibration flag is set. Cleared when clear_diffuse_irradiance_calibration_history flag is set.	N/A	N/A	True	V/(W/m ²)
diffuse irradiance sensitivity 2 2 history 6	0x03ba	float	R-	Read only. Automatically updated when store_diffuse_irradiance_calibration flag is set. Cleared when clear_diffuse_irradiance_calibration_history flag is set.	N/A	N/A	True	V/(W/m ²)
diffuse irradiance sensitivity 2 3 history 6	0x03bc	float	R-	Read only. Automatically updated when store_diffuse_irradiance_calibration flag is set. Cleared when clear_diffuse_irradiance_calibration_history flag is set.	N/A	N/A	True	V/(W/m ²)



SRD100-D1 register list

(0x0300)

Diffuse irradiance calibration

Register name	Register address	Register type	Register access	Register description	Enumeration	Default value	Persistent	Unit
diffuse irradiance sensitivity 3 1 history 6	0x03be	float	R-	Read only. Automatically updated when store_diffuse_irradiance_calibration flag is set. Cleared when clear_diffuse_irradiance_calibration_history flag is set.	N/A	N/A	True	V/(W/m ²)
diffuse irradiance sensitivity 3 2 history 6	0x03c0	float	R-	Read only. Automatically updated when store_diffuse_irradiance_calibration flag is set. Cleared when clear_diffuse_irradiance_calibration_history flag is set.	N/A	N/A	True	V/(W/m ²)
diffuse irradiance sensitivity 3 3 history 6	0x03c2	float	R-	Read only. Automatically updated when store_diffuse_irradiance_calibration flag is set. Cleared when clear_diffuse_irradiance_calibration_history flag is set.	N/A	N/A	True	V/(W/m ²)

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SRD100-D1 register list

(0x0300)

Diffuse irradiance calibration

Register name	Register address	Register type	Register access	Register description	Enumeration	Default value	Persistent	Unit
diffuse irradiance calibration date history 6	0x03c4	u64	R-	Read only. Automatically updated when store_diffuse_irradiance_calibration flag is set. Cleared when clear_diffuse_irradiance_calibration_history flag is set.	N/A	N/A	True	Undefined
diffuse irradiance calibration traceability history 6	0x03c8	u16	R-	Read only. Automatically updated when store_diffuse_irradiance_calibration flag is set. Cleared when clear_diffuse_irradiance_calibration_history flag is set.	N/A	N/A	True	Undefined
diffuse irradiance sensitivity 1 1 history 7	0x03cc	float	R-	Read only. Automatically updated when store_diffuse_irradiance_calibration flag is set. Cleared when clear_diffuse_irradiance_calibration_history flag is set.	N/A	N/A	True	V/(W/m ²)



SRD100-D1 register list

(0x0300)

Diffuse irradiance calibration

Register name	Register address	Register type	Register access	Register description	Enumeration	Default value	Persistent	Unit
diffuse irradiance sensitivity 1 2 history 7	0x03ce	float	R-	Read only. Automatically updated when store_diffuse_irradiance_calibration flag is set. Cleared when clear_diffuse_irradiance_calibration_history flag is set.	N/A	N/A	True	V/(W/m ²)
diffuse irradiance sensitivity 1 3 history 7	0x03d0	float	R-	Read only. Automatically updated when store_diffuse_irradiance_calibration flag is set. Cleared when clear_diffuse_irradiance_calibration_history flag is set.	N/A	N/A	True	V/(W/m ²)
diffuse irradiance sensitivity 2 1 history 7	0x03d2	float	R-	Read only. Automatically updated when store_diffuse_irradiance_calibration flag is set. Cleared when clear_diffuse_irradiance_calibration_history flag is set.	N/A	N/A	True	V/(W/m ²)



SRD100-D1 register list

(0x0300)

Diffuse irradiance calibration

Register name	Register address	Register type	Register access	Register description	Enumeration	Default value	Persistent	Unit
diffuse irradiance sensitivity 2 2 history 7	0x03d4	float	R-	Read only. Automatically updated when store_diffuse_irradiance_calibration flag is set. Cleared when clear_diffuse_irradiance_calibration_history flag is set.	N/A	N/A	True	V/(W/m ²)
diffuse irradiance sensitivity 2 3 history 7	0x03d6	float	R-	Read only. Automatically updated when store_diffuse_irradiance_calibration flag is set. Cleared when clear_diffuse_irradiance_calibration_history flag is set.	N/A	N/A	True	V/(W/m ²)
diffuse irradiance sensitivity 3 1 history 7	0x03d8	float	R-	Read only. Automatically updated when store_diffuse_irradiance_calibration flag is set. Cleared when clear_diffuse_irradiance_calibration_history flag is set.	N/A	N/A	True	V/(W/m ²)



SRD100-D1 register list

(0x0300)

Diffuse irradiance calibration

Register name	Register address	Register type	Register access	Register description	Enumeration	Default value	Persistent	Unit
diffuse irradiance sensitivity 3 2 history 7	0x03da	float	R-	Read only. Automatically updated when store_diffuse_irradiance_calibration flag is set. Cleared when clear_diffuse_irradiance_calibration_history flag is set.	N/A	N/A	True	V/(W/m ²)
diffuse irradiance sensitivity 3 3 history 7	0x03dc	float	R-	Read only. Automatically updated when store_diffuse_irradiance_calibration flag is set. Cleared when clear_diffuse_irradiance_calibration_history flag is set.	N/A	N/A	True	V/(W/m ²)
diffuse irradiance calibration date history 7	0x03de	u64	R-	Read only. Automatically updated when store_diffuse_irradiance_calibration flag is set. Cleared when clear_diffuse_irradiance_calibration_history flag is set.	N/A	N/A	True	Undefined



SRD100-D1 register list

(0x0300)

Diffuse irradiance calibration

Register name	Register address	Register type	Register access	Register description	Enumeration	Default value	Persistent	Unit
diffuse irradiance calibration traceability history 7	0x03e2	u16	R-	Read only. Automatically updated when store_diffuse_irradiance_calibration flag is set. Cleared when clear_diffuse_irradiance_calibration_history flag is set.	N/A	N/A	True	Undefined
diffuse irradiance sensitivity 1 1 history 8	0x03e6	float	R-	Read only. Automatically updated when store_diffuse_irradiance_calibration flag is set. Cleared when clear_diffuse_irradiance_calibration_history flag is set.	N/A	N/A	True	V/(W/m ²)
diffuse irradiance sensitivity 1 2 history 8	0x03e8	float	R-	Read only. Automatically updated when store_diffuse_irradiance_calibration flag is set. Cleared when clear_diffuse_irradiance_calibration_history flag is set.	N/A	N/A	True	V/(W/m ²)



SRD100-D1 register list

(0x0300)

Diffuse irradiance calibration

Register name	Register address	Register type	Register access	Register description	Enumeration	Default value	Persistent	Unit
diffuse irradiance sensitivity 1 3 history 8	0x03ea	float	R-	Read only. Automatically updated when store_diffuse_irradiance_calibration flag is set. Cleared when clear_diffuse_irradiance_calibration_history flag is set.	N/A	N/A	True	V/(W/m ²)
diffuse irradiance sensitivity 2 1 history 8	0x03ec	float	R-	Read only. Automatically updated when store_diffuse_irradiance_calibration flag is set. Cleared when clear_diffuse_irradiance_calibration_history flag is set.	N/A	N/A	True	V/(W/m ²)
diffuse irradiance sensitivity 2 2 history 8	0x03ee	float	R-	Read only. Automatically updated when store_diffuse_irradiance_calibration flag is set. Cleared when clear_diffuse_irradiance_calibration_history flag is set.	N/A	N/A	True	V/(W/m ²)



SRD100-D1 register list

(0x0300)

Diffuse irradiance calibration

Register name	Register address	Register type	Register access	Register description	Enumeration	Default value	Persistent	Unit
diffuse irradiance sensitivity 2 3 history 8	0x03f0	float	R-	Read only. Automatically updated when store_diffuse_irradiance_calibration flag is set. Cleared when clear_diffuse_irradiance_calibration_history flag is set.	N/A	N/A	True	V/(W/m ²)
diffuse irradiance sensitivity 3 1 history 8	0x03f2	float	R-	Read only. Automatically updated when store_diffuse_irradiance_calibration flag is set. Cleared when clear_diffuse_irradiance_calibration_history flag is set.	N/A	N/A	True	V/(W/m ²)
diffuse irradiance sensitivity 3 2 history 8	0x03f4	float	R-	Read only. Automatically updated when store_diffuse_irradiance_calibration flag is set. Cleared when clear_diffuse_irradiance_calibration_history flag is set.	N/A	N/A	True	V/(W/m ²)



SRD100-D1 register list

(0x0300)

Diffuse irradiance calibration

Register name	Register address	Register type	Register access	Register description	Enumeration	Default value	Persistent	Unit
diffuse irradiance sensitivity 3 3 history 8	0x03f6	float	R-	Read only. Automatically updated when store_diffuse_irradiance_calibration flag is set. Cleared when clear_diffuse_irradiance_calibration_history flag is set.	N/A	N/A	True	V/(W/m ²)
diffuse irradiance calibration date history 8	0x03f8	u64	R-	Read only. Automatically updated when store_diffuse_irradiance_calibration flag is set. Cleared when clear_diffuse_irradiance_calibration_history flag is set.	N/A	N/A	True	Undefined
diffuse irradiance calibration traceability history 8	0x03fc	u16	R-	Read only. Automatically updated when store_diffuse_irradiance_calibration flag is set. Cleared when clear_diffuse_irradiance_calibration_history flag is set.	N/A	N/A	True	Undefined

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SRD100-D1 register list

(0x0400)

Detector array irradiance signals

Register name	Register address	Register type	Register access	Register description	Enumeration	Default value	Persistent	Unit
active detector row number	0x0400	u16	R-	Row number of detector currently being used to measure diffuse irradiance.	N/A	N/A	False	Undefined
active detector column number	0x0401	u16	R-	Column number of detector currently being used to measure diffuse irradiance.	N/A	N/A	False	Undefined
temperature compensated diffuse irradiance estimator 1 1	0x0420	float	R-	Temperature compensated diffuse irradiance estimator in W/m ² .	N/A	N/A	False	W/m ²
temperature compensated diffuse irradiance estimator 1 2	0x0422	float	R-	Temperature compensated diffuse irradiance estimator in W/m ² .	N/A	N/A	False	W/m ²
temperature compensated diffuse irradiance estimator 1 3	0x0424	float	R-	Temperature compensated diffuse irradiance estimator in W/m ² .	N/A	N/A	False	W/m ²
temperature compensated diffuse irradiance estimator 2 1	0x0426	float	R-	Temperature compensated diffuse irradiance estimator in W/m ² .	N/A	N/A	False	W/m ²
temperature compensated diffuse irradiance estimator 2 2	0x0428	float	R-	Temperature compensated diffuse irradiance estimator in W/m ² .	N/A	N/A	False	W/m ²

temperature compensated diffuse irradiance estimator 2 3	0x042a	float	R-	Temperature compensated diffuse irradiance estimator in W/m ² .	N/A	N/A	False	W/m ²
temperature compensated diffuse irradiance estimator 3 1	0x042c	float	R-	Temperature compensated diffuse irradiance estimator in W/m ² .	N/A	N/A	False	W/m ²
temperature compensated diffuse irradiance estimator 3 2	0x042e	float	R-	Temperature compensated diffuse irradiance estimator in W/m ² .	N/A	N/A	False	W/m ²
temperature compensated diffuse irradiance estimator 3 3	0x0430	float	R-	Temperature compensated diffuse irradiance estimator in W/m ² .	N/A	N/A	False	W/m ²
diffuse irradiance estimator 1 1	0x0440	float	R-	Uncompensated diffuse irradiance estimator in W/m ² .	N/A	N/A	False	W/m ²
diffuse irradiance estimator 1 2	0x0442	float	R-	Uncompensated diffuse irradiance estimator in W/m ² .	N/A	N/A	False	W/m ²
diffuse irradiance estimator 1 3	0x0444	float	R-	Uncompensated diffuse irradiance estimator in W/m ² .	N/A	N/A	False	W/m ²
diffuse irradiance estimator 2 1	0x0446	float	R-	Uncompensated diffuse irradiance estimator in W/m ² .	N/A	N/A	False	W/m ²
diffuse irradiance estimator 2 2	0x0448	float	R-	Uncompensated diffuse irradiance estimator in W/m ² .	N/A	N/A	False	W/m ²
diffuse irradiance estimator 2 3	0x044a	float	R-	Uncompensated diffuse irradiance estimator in W/m ² .	N/A	N/A	False	W/m ²
diffuse irradiance estimator 3 1	0x044c	float	R-	Uncompensated diffuse irradiance estimator in W/m ² .	N/A	N/A	False	W/m ²

diffuse irradiance estimator 3 2	0x044e	float	R-	Uncompensated diffuse irradiance estimator in W/m ² .	N/A	N/A	False	W/m ²
diffuse irradiance estimator 3 3	0x0450	float	R-	Uncompensated diffuse irradiance estimator in W/m ² .	N/A	N/A	False	W/m ²

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SRD100-D1 register list

(0x0580)

Heater

Register name	Register address	Register type	Register access	Register description	Enumeration	Default value	Persistent	Unit
heater state	0x0580	u16	RW	The current state of the internal heating.	0: disabled 1: enabled 3: error	1	True	Undefined
heater duty cycle	0x0581	u16	RW	Heater duty cycle percentage for heater power control. Values will be rounded to a multiple of 10 (i.e. duty cycle is settable in steps of 10%). Values lower than 10 will always be rounded upwards (i.e. a duty cycle of 0% is not possible).	N/A	100	True	%
heater current	0x0582	i16	R-	Heater current in mA.	N/A	N/A	False	mA
heater current lower limit	0x0583	i16	R-	Heater current lower limit in mA. The heater current below which the heater under current indicator flag is set.	N/A	200	True	mA
heater current upper limit	0x0584	i16	R-	Heater current upper limit in mA. The heater current above which the heater over current indicator flag is set.	N/A	500	True	mA
heater under current	0x0585	bool	R-	Heater under-current indicator.	N/A	N/A	False	Undefined
heater over current	0x0586	bool	R-	Heater over-current indicator.	N/A	N/A	False	Undefined

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SRD100-D1 register list

(0x0680)

Internal humidity

Register name	Register address	Register type	Register access	Register description	Enumeration	Default value	Persistent	Unit
internal relative humidity	0x0680	float	R-	The internal relative humidity in %.	N/A	N/A	False	%
internal high humidity threshold	0x0684	u16	RW	High internal relative humidity threshold in %. The threshold above which the high humidity indicator flag is set.	N/A	40	True	%
internal high humidity indicator	0x0685	bool	R-	High internal humidity indicator.	N/A	N/A	False	Undefined
internal relative humidity int	0x0686	u16	R-	The internal relative humidity in 1/100 of %.	N/A	N/A	False	% x 1/100
internal relative humidity stats	0x06e0	statistic	R-	Statistic values for internal relative humidity signal: min, max, avg, std. Reset accumulation on read.	N/A	N/A	False	%

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SRD100-D1 register list

(0x0880)

Status

Register name	Register address	Register type	Register access	Register description	Enumeration	Default value	Persistent	Unit
device status 1	0x0880	u16	R-	Device status register 1: bit 15: future use, bit 14: future use, bit 13: future use, bit 12: future use, bit 11: future use, bit 10: aliases status after startup, bit 9: humidity sensor communication error, bit 8: relative humidity high, bit 7: adc communication error, bit 6: calibration history full, bit 5: calibration history cleared, bit 4: calibration successful, bit 3: default settings mode, bit 2: maintenance mode, bit 1: heater over-current, bit 0: heater under-current	N/A	N/A	False	Undefined
uptime counter	0x08a0	u32	R-	Uptime counter that starts counting every second after device boot.	N/A	N/A	False	Undefined



SRD100-D1 register list

(0x0880) Status

Register name	Register address	Register type	Register access	Register description	Enumeration	Default value	Persistent	Unit
mcudaq pth assert counter	0x08a2	u32	R-	The amount of times an ASSERT statement has failed on the MCUDAQ-PTH. The ASSERT statements are mostly used to prevent initialization errors, configuration errors and operations on non-existent memory.	N/A	N/A	True	Undefined



SRD100-D1 register list

(0x0900)

Maintenance

Register name	Register address	Register type	Register access	Register description	Enumeration	Default value	Persistent	Unit
maintenance mode	0x0900	u16	RW	Maintenance mode switch. Intended for factory use only. Will always read as 0x0000 when not active.	N/A	N/A	False	Undefined
soft reboot	0x0901	u16	RW	Soft restart when the special value 0x587f is written. Restart into bootloader for firmware upgrade when special value 0xa54c is written. All other values will be ignored.	22655: soft restart 42316: bootloader restart	N/A	False	Undefined



SRD100-D1 register list

(0x0980)

Pt1000 signals

Register name	Register address	Register type	Register access	Register description	Enumeration	Default value	Persistent	Unit
temperature	0x0980	float	R-	Measured temperature in °C.	N/A	N/A	False	°C
temperature int	0x0982	i32	R-	Measured temperature in °C / scaling factor.	N/A	N/A	False	°C / scaling factor
temperature scaling factor	0x0984	u16	R-	Scaling factor for the temperature integer register.	N/A	100	False	Undefined
pt1000 resistance	0x0986	float	R-	Resistance of the Pt1000 in ohm.	N/A	N/A	False	Ω
pt1000 voltage	0x0988	float	R-	Voltage measured across the Pt1000 in V.	N/A	N/A	False	V
raw adc word	0x098a	i32	R-	Raw AD conversion word as retrieved from ADC after filtering.	N/A	N/A	False	LSB
reference voltage	0x098c	float	R-	Reference voltage node, calculated based on VDD and the values for Rbridge and Rref in V.	N/A	N/A	False	V



SRD100-D1 register list

(0x0a00)

Pt1000 calibration

Register name	Register address	Register type	Register access	Register description	Enumeration	Default value	Persistent	Unit
pt1000 temperature coefficient	0x0a00	float	R-	Pt1000 temperature coefficient.	N/A	0.00391	False	1/K
circuit amplification	0x0a02	float	R-	Temperature circuit amplification factor.	N/A	7.5	False	Undefined
pt1000 nominal resistance	0x0a04	float	R-	Nominal resistance of the Pt1000 at 0°C in ohm.	N/A	1000.0	False	Ω
bridge resistance	0x0a06	float	R-	Resistance of the resistor in the bridge with the Pt1000 in ohm.	N/A	10000.0	False	Ω
reference resistance	0x0a08	float	R-	Resistance of the reference resistor in the voltage divider in ohm.	N/A	820.0	False	Ω

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SRD100-D1 register list

(0x1000)

Modbus mapping

Register name	Register address	Register type	Register access	Register description	Enumeration	Default value	Persistent	Unit
alias address	0x1000	u16	RW	The alias or new address of a register. Writing to this register will cause the 'original_address' register to be updated with the original address of the register for the selected alias address. To place a register at the alias address, write the original address of that register to the `original_address` register. Note that it is possible to map a different register over the registers that control aliases. In that case it is still possible to make changes to the aliases, either through the default-settings mode or through the Read Default Map Registers and Write Default Map Registers function codes.	N/A	N/A	True	Undefined

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SRD100-D1 register list

(0x1000)

Modbus mapping

Register name	Register address	Register type	Register access	Register description	Enumeration	Default value	Persistent	Unit
original address	0x1001	u16	RW	The original address of a register. Will be updated by setting 'aliased_address'. If the aliased address does not exist, this register will contain 0xFFFF. Writing to this register will update an alias. This should always be the first or starting address of a register (in case of a register that spans multiple addresses). If another address is written, the alias address to original address configuration is accepted but ignored when accessing alias address. Note that it is not possible to remove an alias. It is only possible to remove all aliases.	65535: alias non existent	N/A	False	Undefined
erase aliases	0x1002	u16	RW	Write 0x990E to erase all existing aliases. Writing any other value is rejected.	39182: erase all aliases	N/A	False	Undefined



SRD100-D1 register list

(0x1000)

Modbus mapping

Register name	Register address	Register type	Register access	Register description	Enumeration	Default value	Persistent	Unit
aliases status after startup	0x1003	bool	RW	Indication and control of persistent register aliases status the device assumes after the startup. True means register aliases are taken into account for a Modbus request, false - ignored.	N/A	true	True	Undefined
aliases status	0x1004	bool	RW	Indication and control of register aliases status done in non-persistent manner. True means register aliases are taken into account for a Modbus request, false - ignored.	N/A	N/A	False	Undefined