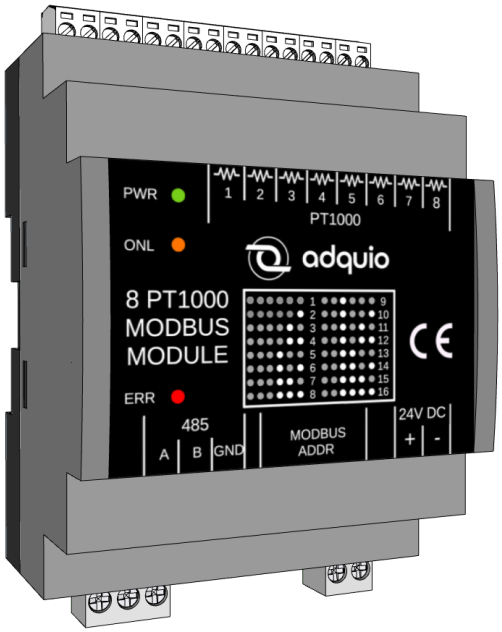
DATA SHEET

ACQUIO 8 PT1000 MODBUS MODULE

8-probe PT1000 modbus module

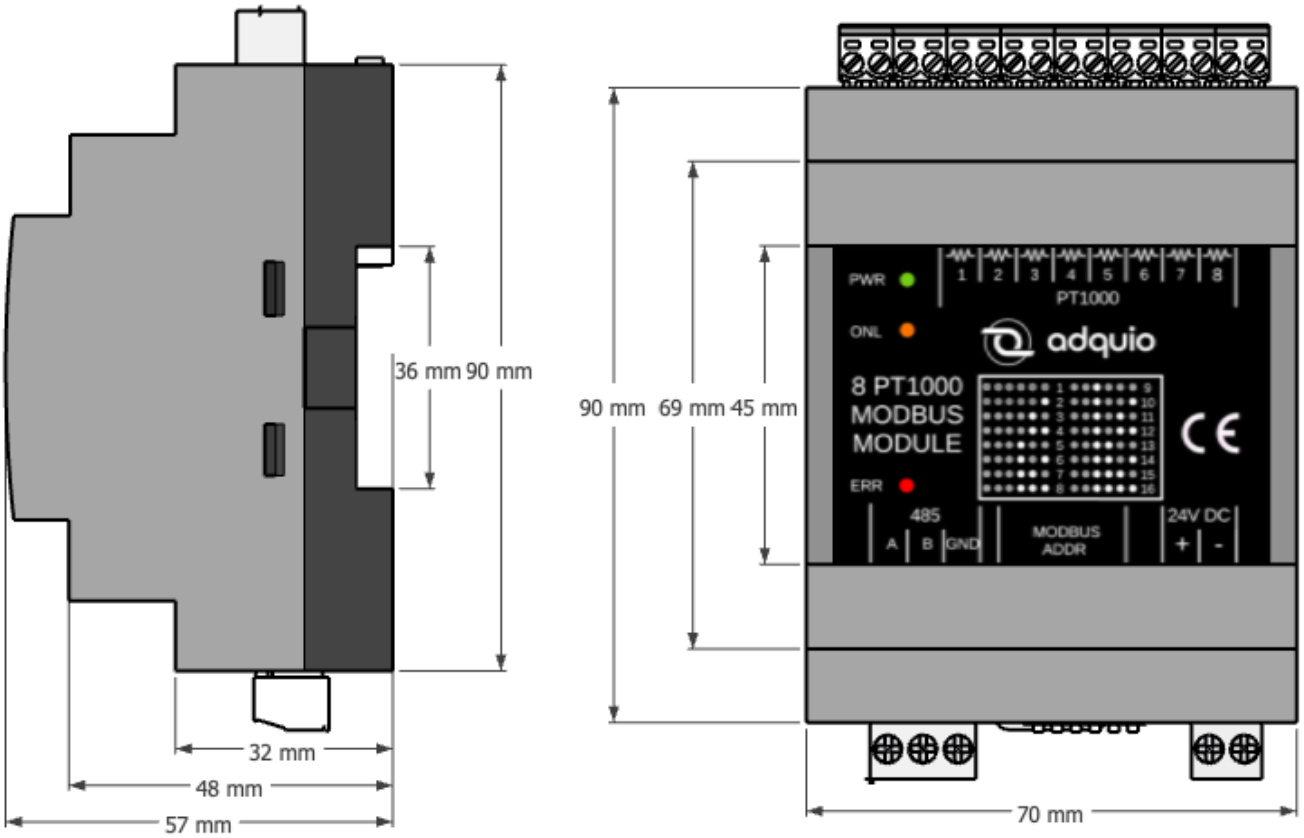


1 Ordering information

Reference	Description	Life cycle *
ADQ-SA-8PT1000	Acquio 8 PT1000 modbus module, 8-probe module PT1000 „ 1 485 slave	Active

* For planning and commissioning of new installations use modules in Active state only

2 Dimensions



3 Technical data

Parameter		Value
Process voltage		
	Connections	Removable terminal block 5.08 Pitch 2 contacts
	Nominal value	24 VDC
	Maximum supported	28 VDC
	Protection against voltage reversal	Yes
	Nominal protection fuse up to	3 A
Consumption		
	From a 24V power supply	15 mA
	Maximum consumption	20 mA
	Maximum consumption peak at start-up	15 mA

CAUTION!
Exceeding the maximum power supply voltage for the process or supply voltages could cause irrecoverable damage to the system. The system could be destroyed.

CAREFUL!!
Improper connection cables cause overheating at the terminals.
Acquio pro, they can be destroyed if the wrong cable type, cable size or cable temperature rating is used.

3.1 Technical data of the PT1000 inputs

Parameter	Value
Number of inputs	8
Connections	8 Removable terminal blocks 3.51 Pitch 2 contacts
Resolution	15 Bits
Adjustable by software	Yes

4 System data

4.1 Environmental conditions

Parameter		Value
Temperature		
	Operation	0 ° C ... + 60 ° C (Horizontal mounting on DIN rail)
	Storage	-40 ° C ... + 70 ° C
	Transport	-40 ° C ... + 70 ° C
Humidity		Max. 95% non-condensing
Air pressure		
	Operation	> 800 hPa / <2000 m
	Storage	> 600 hPa / <3500 m
Insulation		IP20

4.2 Mechanical data

Parameter	Value
Mounting	Horizontal
Protection level	IP20
Housing material	ABS UL-94-HB Dark gray
Mounting alternatives	
Rail DIN EN 50022 DIN	35 mm, depth 7.5 mm or 15 mm
mounting screws	screw with a diameter of 4 mm
tightening torque	1.2 Nm

4.4Communications

Parameter		Value
485slave		
	No.	1
	Protocol	Modbus RTU

configuration Table 4.5 Modbus registers

Positions Modbus						
Function	**Address**	**Description**	**Read**	**Write**	**Type**	**Size**
03/06	0	Power Led (0-1)	Yes	Yes	Holding Register	16 Bits
03/06	1	PT1000 Probe 1	Yes	No	Holding Register	16 Bits
03/06	2	PT1000 Probe 2	Yes	No	Holding Register	16 Bits
03/06	3	PT1000 Probe 3	Yes	No	Holding Register	16 Bits
03/06	4	PT1000 Probe 4	Yes	No	Holding Register	16 Bits
03/06	5	PT1000 Probe 5	Yes	No	Holding Register	16 Bits
03/06	6	PT1000 Probe 6	Yes	No	Holding Register	16 Bits
03/0 6	7	Probe PT1000 7	Yes	No	Holding Register	16 Bits
03/06	8	Probe PT1000 8	Yes	No	Holding Register	16 Bits
03/06	9	Error LED (0-1)	Yes	Yes	Holding Register	16 Bits
03/06	10	Modbus address	Yes	No	holding Register	16 Bits

* records probes should be divided by 100 to obtain the actual temperature

4.6 configuration Table modbus direction microswitches

Switch 1	Switch 2	Switch 3	Switch 4	Switch 5	Switch 6	Modbus address
Off	Off	Off	Off	Off	Off	01
Off	Off	Off	Off	Off	On	02
Off	Off	Off	Off	On	Off	03
Off	Off	Off	Off	On	On	04
Off	Off	Off	On	Off	Off	05
Off	Off	Off	On	Off	On	06

Off	Off	Off	On	On	Off	07
Off	Off	Off	On	On	On	08
Off	Off	On	Off	Off	Off	09
Off	Off	On	Off	Off	On	10
Off	Off	On	Off	On	Off	11
Off	Off	On	Off	On	On	12
Off	Off	On	On	Off	Off	13
Off	Off	On	On	Off	On	14
Off	Off	On	On	On	Off	15
Off	Off	On	On	On	On	16
Off	On	Off	Off	Off	Off	17
Off	On	Off	Off	Off	On	18
Off	On	Off	Off	On	Off	19
Off	On	Off	Off	On	On	20
Off	On	Off	On	Off	Off	2 1
Off	On	Off	On	Off	On	22
Off	On	Off	On	On	Off	23
Off	On	Off	On	On	On	24
Off	On	On	Off	Off	Off	25
Off	On	On	Off	Off	On	26
Off	On	On	Off	On	Off	27
Off	On	On	Off	On	On	28
Off	On	On	On	Off	Off	29
Off	On	On	On	Off	On	30
Off	On	On	On	On	Off	31
Off	On	On	On	On	On	32
On	Off	Off	Off	Off	Off	33

On	Off	Off	Off	Off	On	34
On	Off	Off	Off	On	Off	35
On	Off	Off	Off	On	On	36
On	Off	Off	On	Off	Off	37
On	Off	Off	On	Off	On	38
On	Off	Off	On	On	Off	39
On	Off	Off	On	On	On	40
On	Off	On	Off	Off	Off	41
On	Off	On	Off	Off	On	42
On	Off	On	Off	On	Off	43
On	Off	On	Off	On	On	44
On	Off	On	On	Off	Off	45
On	Off	On	On	Off	On	46
On	Off	On	On	On	Off	47
On	Off	On	On	On	On	48
On	On	Off	Off	Off	Off	49
On	On	Off	Off	Off	On	50
On	On	Off	Off	On	Off	51
On	On	Off	Off	On	On	52
On	On	Off	On	Off	Off	53
On	On	Off	On	Off	On	54
On	On	Off	On	On	Off	55
On	On	Off	On	On	On	56
On	On	On	Off	Off	Off	57
On	On	On	Off	Off	On	58
On	On	On	Off	On	Off	59
On	On	On	Off	On	On	60

On	On	On	On	Off	Off	61
On	On	On	On	Off	On	62
On	On	On	On	On	Off	63
On	On	On	On	On	On	64

4.7 Certifications

Parameter	Value
Safety and Health	EN ISO 13849-1: 2015 EN ISO 13849-2: 2012 EN 62061: 2005 + A1: 2013 + A2: 2015 EN 60950-1: 2006 EN 62311: 2008
EMC	EN 61000 -6-4: 2007 + A1: 2011 EN 61000-6-2: 2005 ETSI EN 301 489-1 v2.2.0 ETSI EN 301 489-17 v3.2.0
RoHS	EN 50581: 2012

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