

DATA SHEET

ACQUIO MINI IOS MODBUS MODULE

Modbus module with 4 outputs and 6 digital inputs



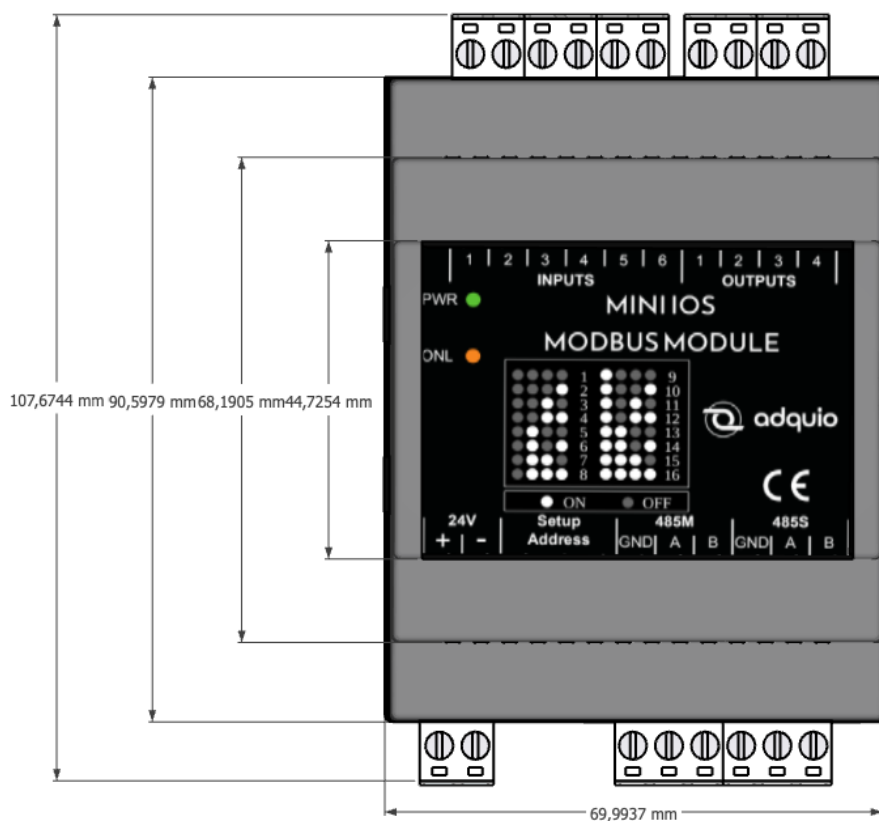
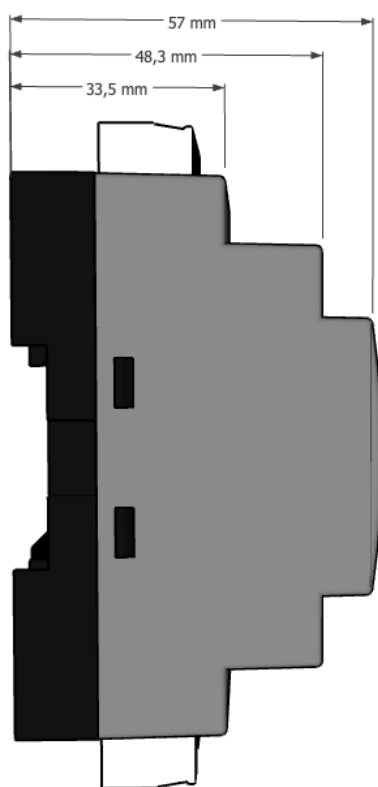
1 Ordering information

Reference	Description	Life cycle *
ADQ-SA-4DO-6DI	Adquio Mini IOs modbus module, module with 4 outputs and 6 digital inputs, 1 485 slave and 1 485 master	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 process or supply voltages could cause irrecoverable damage to the system. The system could be destroyed.



WATCH OUT!!

Improper connection cables cause overheating at the terminals. Adquio mini IOs, they can be destroyed if the wrong cable type, cable size or cable temperature rating is used.

3.1 Technical data of digital inputs

Parameter	Value
Number of inputs	6
Connections	1 Removable terminal block 3.51 Pitch 6 contacts
Overvoltage protection	Yes
Range	Active 1 from 5V

3.2 Technical data of digital outputs

Parameter	Value
Number of outputs	4
Connections	1 Terminal block removable 3.51 Pitch 4 contacts
Overvoltage protection	Yes
Range	24 V (with power transistors)

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

4.4 Communications

Parameter		Value
Slave 485		
	No.	1
	Protocol	Modbus RTU
Master 485		
	No.	1
	Protocol	Modbus RTU

4.5 Configuration table Modbus registers

Modbus Positions						
Function	Address	Description	Read	Write	Type	Size
03/06	4	Input 1	Yes	No	Holding Register	16 Bits
03/06	5	Entry 2	If	No	Holding Register	16 Bits
03/06	6	Entry 3	If	No	Holding Register	16 Bits
03/06	7	Input 4	Yes	No	Holding Register	16 Bits
03/06	8	Input 5	Yes	No	Holding Register	16 Bits
03/06	9	Input 6	Yes	No	Holding Register	16 Bits
03/06	10	Output 1	Yes	Yes	Holding Register	16 Bits
03/06	11	Output 2	Yes	Yes	Holding Register	16 Bits
03/06	12	Output 3	Yes	Yes	Holding Register	16 Bits
03/06	13	Output 4	Yes	Yes	Holding Register	16 Bits
03/06	14	Change 1	Yes	Yes	Holding Register	16 Bits
03 / 06	15	Change 2	Yes	Yes	Holding Register	16 Bits
03/06	16	Change 3	Yes	Yes	Holding Register	16 Bits
03/06	17	Change 4	Yes	Yes	Holding Register	16 Bits
03/06	49	Power Led	Yes	Yes	Holding Register	16 Bits



* Registers of Change X, when they are set to 1 they exchange the existing value for the opposite. That is to say: Change 1 when setting it to 1, puts in output 1 a 0 if there was a 1, and a 1 if there was a 0. The change register automatically returns to 0 once the change is made.

4.6 Modbus address configuration table with microswitches

Switch 1	Switch 2	Switch 3	Switch 4	Modbus address
Off	Off	Off	Off	01
Off	Off	Off	On	02
Off	Off	On	Off	03
Off	Off	On	On	04
Off	On	Off	Off	05
Off	On	Off	On	06
Off	On	On	Off	07
Off	On	On	On	08
On	Off	Off	Off	09
On	Off	Off	On	10
On	Off	On	Off	11
On	Off	On	On	12
On	On	Off	Off	13
On	On	Off	On	14
On	On	On	Off	15
On	On	On	On	16

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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