

Classical.
Versatile.
Different.



PM10 SMART METER

Multi-channel
16 000 variations
Multicolor and divisible display
Mathematical functions

PM10 SMART METER

PM10 - MULTI-CHANNEL PANEL DISPLAY

PM10 smart meter series is the pre-eminent display on the market. It is the result of multiple years of development and customer feedback.

It combines many new innovations and good technical implementations of previous Nokeval products. There are already 16 000 variations how to use PM10 and more to come.



HIGHLIGHTS

Features:

- Two input channels (with option cards 4-8 channels), Pt100, thermocouples, 4-20 mA, 0-10V/mV
- Two output channels for 4-20 mA or 0-10V outputs
- Two alarm relays
- I/O-lines
- Multi-color six-character alphanumeric display
- A wide range of mathematical functions
- MicroUSB connector for MekuWin configuration
- The ability to lock the cards with screws very tightly for vibration sensitive conditions
- Serial output RS485, Modbus protocol
- Power supply 24 VDC

Features of optional cards:

- Two channel output card
- Two alarm relay card
- Pulse input card (ask for delivery time)
- Wireless radio card (ask for delivery time)
- Power supply card for 90..240 VAC (ask for delivery time)



Slots of the motherboard are freely selectable for input and output cards.

ITEM			
PM10A	Case + Display		
POW24SA	Power with Serial Bus		
UNI2A	Universal Input x2		
OUT2A	Process Output x2		
REL2A	Relay Output x2		
COMBINATION EXAMPLES		INPUT OUTPUT RELAY	
PM10A - UNI2A - POW24SA		2	0 0
PM10A - UNI2A - REL2A - POW24SA		2	0 2
PM10A - UNI2A - UNI2A - UNI2A - POW24SA		8	0 0
PM10A - UNI2A - UNI2A - OUT2A - OUT2A - POW24SA		4	4 0
PM10A - UNI2A - UNI2A - REL2A - REL2A - POW24SA		4	0 4
PM10A - UNI2A - OUT2A - REL2A - POW24SA		2	2 2
PM10A - POW24SA		0	0 0
PM10A - OUT2A - POW24SA		0	2 0
PM20A-4xUNI2A-4xOUT2A-... [PM20 coming out 2015]		8	8 2

PM10

DETAILS:

Inputs	mA, mV, Ohm, Pt100, Pt1000, Thermocouples, V
Input channels	1-8
Galvanic isolation	Input galvanically isolated from power supply and other cards
Output channels	1-8
Connector model	MicroUSB
Bus protocol	Modbus RTU (Nokeval SCL)
Bus interface	RS-485
Baud rates	300, 600, 1200, 2400, 4800, 9600, 19200, 38400, 57600, 115200 and 230400
Programming	Mekuwin
Display color	red, green and orange simultaneously
Number of digits	6
Digit size	14.5 mm
Display	12 segment LED
Supply voltage	24 VDC: 21...27 VDC
Dimensions	96 x 48 x115 mm (WHD)
Max. ambient temp.	60°C
Min. ambient temp.	-10°C
Case material	plastic, black
Installation	Panel
Protection class	IP65 (front panel with a rubber gasket provided)
Weight	290 g (with the maximum number of cards)

PM10UNI2A

INPUTS

mA, mV, Ni, Cu, KTY83, NTCLE3977, NPN, ohm, Pt100, Pt1000, Thermocouples B, C, D, E, G, J, K, L, N, R, S, T, V

INPUT CHANNELS 2

GALVANIC ISOLATION

Input galvanically isolated from processor and power supply

PM10OUT2A

OUTPUTS

2 x 0-10V or 4-20 mA or 0-20 mA or other ranges between 0...10 V and 0...20 mA outputs

+15VDC output
digital output or input

PM10REL2A

OUTPUT

2 x alarm relays
relay information
SPDT, 5 A, 250 VAC

Connection, connector
model 2.5mm², detachable

PM10POW24SA

CONNECTION

connector model 1.5 mm²,
2.5 mm², detachable

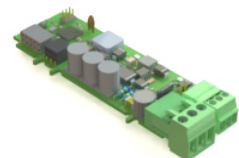
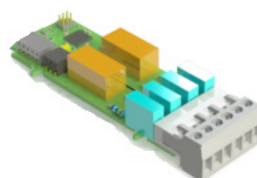
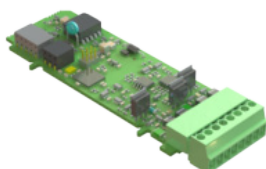
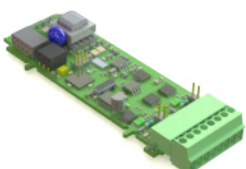
BUS PROTOCOL

Modbus RTU, Nokeval SCL
Bus interface digital output
or input RS-485

Baud rates 300, 600, 1200,
2400, 4800, 9600, 19200,
38400, 57600, 115200 and
230400

Programming Mekuwin

Supply voltage
24 VDC: 21...27 VDC



Temperature expert - and much more

Nokeval is an independent, family-owned Finnish company founded in 1980. Nokeval's special field of expertise is temperature measurement. Nokeval offers a wide variety of products and services related to temperature, humidity and other environmental measurements, ranging from temperature measurements of molten steel to surface hygiene measurements in food processing industry. Product segments include wireless transmitters and measuring systems, panel meters, field displays, IR cameras and temperature transmitters, signal converters, galvanic isolators and temperature sensors.



Made to measure

Nokeval heavily invests in research and development to continually offer innovative and competitive new products and solutions. Good examples of this are our new OVA service, an internet based data collection and reporting platform that utilizes our proven wireless technology, and PM10 series of Smart Meters - the world's most versatile panel meter range.

Worldwide supplier

Nokeval's clientele is wide and mainly consists of companies in process and manufacturing industry. Nokeval exports products around the world and it has distributors in most European countries and, for example, in Korea and Peru.

Nokeval Oy | Rounionkatu 107 | FI-37150 Nokia, Finland | sales@nokeval.com | www.nokeval.com

YOUR DISTRIBUTOR: