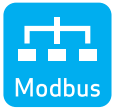


M60-RTU Display for Modbus RTU

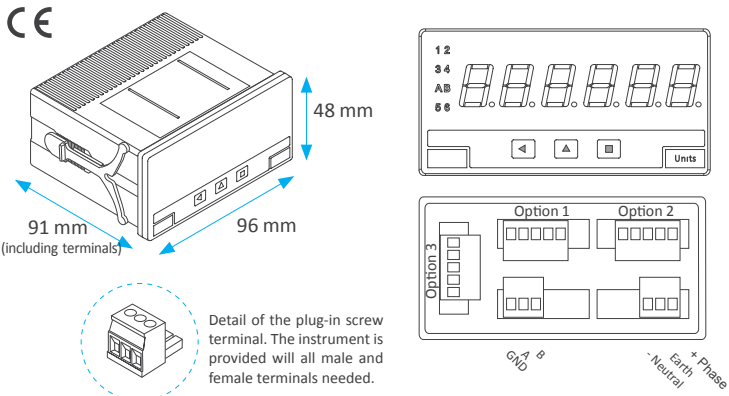
Display for Modbus RTU protocol with 6 digits and 14 mm digit height in red or green color. Standard 96 x 48 mm (1/8 DIN) size, for panel mount. Configurable 16 bit or 32 bit registers. Reading range from 999999 to -199999. Decimal point. Two configurable working modes with different alarm controls: 'Full slave' and 'Process slave'. 'Watchdog' function, 'Bus activity' function, 'Fast access' menu, 'On power up' function. Universal high and low AC and DC power options. Optional output modules with relay, transistor, SSR control and analog outputs.



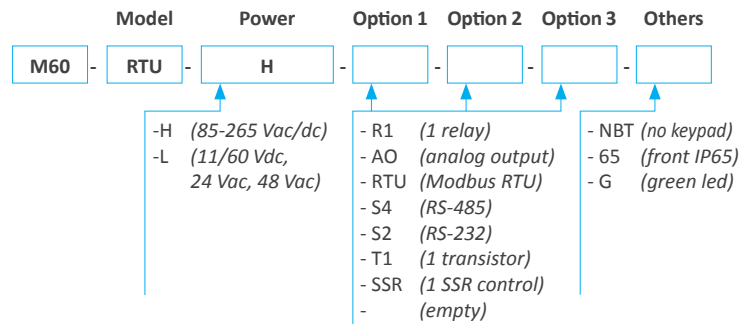
Technical specifications

Digits	6
Reading	999999 / -199999 (with 32 bit registers) 32767 / -32767 (with 16 bit registers)
Decimal point	X.X.X.X.X
Led color	red or green
Digit height	14 mm
Protocol	Modbus RTU
Bus	RS-485
Function	Modbus RTU slave
Speed	from 38.400 bps to 600 bps (19.200 bps by default)
Data format	8n1, 8e1, 8o1, 8n2
Address	1 to 247
Bus terminators	not included
Watchdog	configurable from 1 to 120 seconds
Functions supported	6 - Write single register 16 - Write multiple registers 3 - Read registers 5 - Write single coil 15 - Write multiple coils 1 - Read coils
Power 'H'	85 to 265 Vac/dc (isolated 2500 Veff)
Power 'L'	11 to 60 Vdc and 24/48 Vac (isolated 1500 Veff)
Retransmission and control options	relays, analog output, serial communications, ...
Consumption	<1.5 W (meter only) <4.0 W (meter with options)
Front protection	IP65
Connections	plug-in screw terminal
Weight	<150 grams
Mounting	panel
Front size	96 x 48 mm
Panel cut-out	92 x 44 mm
Deep	91 mm (including terminals)
Operating temperature	0 to 50 °C

Dimensions and connections



Order reference



* Relays R1 with contacts (NC / NO / Common), max. 250 Vac 8 A
 * Special options with 4 and 6 relays.
 * Analog outputs and serial outputs, isolated.

Functions included

- 'Full slave' / 'Process slave' ... 'Full slave' allows for remote control of the alarms by writing to registers or coils. 'Process slave' allows for local control of alarms, based on local alarm configuration and actual display value.
- 'Watchdog' function ... generates error after predefined time without communication with the master. Alarm can be linked to the watchdog function.
- 'Bus activity' function ... detects electrical activity on the bus. Useful for troubleshooting.
- 'Fast access' menu ... specific menu entries can be associated to key UP ('^'), such as display address, or alarm setpoints.
- 'On power-up' function ... configurable delay at start-up, and configurable state of alarms at start-up.
- Brightness ... 5 levels of brightness intensity.
- Password ... blocks access to configuration menu.

Output and control options

Model	Power	Option 1	Option 2	Option 3	Others
M60	RTU				
Function	Installable options	Isolated			
R1	1 relay output	3	yes		
T1	1 transistor output	3	yes		
SSR	1 control for SSR relay	3	yes		
AO	1 analog output	3	yes		
RTU	1 Modbus RTU port	3	yes		
S4	1 RS-485 port	3	yes		
S2	1 RS-232 port	3	yes		
R2, R4, R6	special modules up to 6 relay outputs. Check for information.				

Other options

Option NBT



Without front keypad

Option G



Green leds

Accessories

WME



Wall mount

DRA



DIN rail mount

THM



Benchtop housing

KIP



Protector IP65

KA96



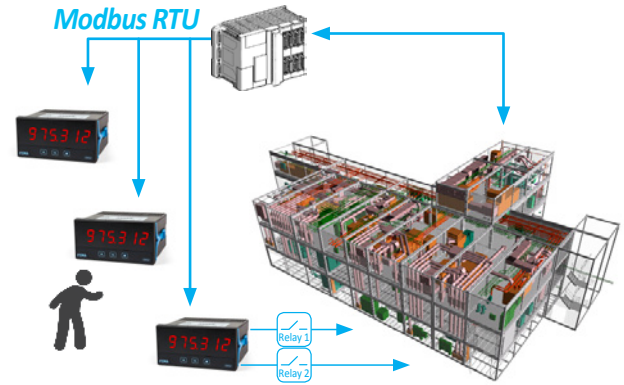
Adapter 96 x 96 mm

Additional documentation

M60-RTU user's manual	www.fema.es/docs/3690_M60-RTU_manual_en.pdf
M60-RTU datasheet	www.fema.es/docs/3691_M60-RTU_datasheet_en.pdf
Options user's manual	www.fema.es/docs/4254_SERIES_M-K-S_OPTIONS_manual_en.pdf

Application example

Factory signals are concentrated into a PLC who receives and manages factory processes. Critical information can be numerically communicated to local operators via Modbus RTU repeaters M60-RTU. Local displayed values are of valuable help to the operator, who can review in a single and fast visual check the main critical parameters of the system.



Reading distances

Digit height (mm)	10	14	20	60	100
Reading distance	4 m	5 m	8 m	20 m	40 m
Series	L	M,S	K	B2x	B4x

Other Modbus RTU repeaters

Series M

4, 5 and 6 digits
digit height 14 mm
color red, green
vision 5 meters
size 96 x 48 mm

DIGITAL PANEL METER
SERIES M
Full Signal Ranges Available



45 YEARS

Series K

Further view
digit height 20 mm
color red
vision 8 meters
size 96 x 48 mm

DIGITAL PANEL METERS
SERIES K
20 mm Digit Size



45 YEARS

Series S

Compact size
digit height 14 mm
color red, green
vision 5 meters
size 72 x 36 mm

DIGITAL PANEL METERS
SERIES S
Compact Size 72x36 mm



45 YEARS