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PN# tn196-2.doc - 26.01.2012 - Ver. 1.02

UniOP MD02R-04

Compact HMI devices with 9 function keys, numerical keypad and 20 characters display.

Highlights

- **Shows up to 4 rows, 20 characters of information**
- **Monochorme LCD**
- **9 user programmable function keys with slide-in legends**
- **10 user programmable LED indicators**
- **Multilanguage project capability**
- **Dual-driver communication**
- **Connection to industrial bus systems and Ethernet with optional modules**
- **IP65 front panel protection**

The MD02R-04 HMI panels are compact low cost products yet extremely rich in functionality. The products support the rich common functionality of the UniOP operator panels:

- Powerful and intuitive programming with the UniOP Designer software
- Dual-driver communication capability,
- Support of more than 130 communication drivers for industrial devices
- Optional modules for fieldbus systems (Profibus DP, DeviceNet, CANopen, Interbus) and Ethernet
- Display data in numerical, text and bargraph format
- Recipe data storage
- Keyboard macro editor
- Alarms and historical alarm list
- Eight level password protection

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Technical Data

The product is available in two versions that differ only by display type.

MD02R-04	Display LCD	Colors -	Backlight LCD	Lifetime 100.000 hours

Display	
Rows/columns	4/20
Character height	5 mm
User definable characters	8
Contrast regulation	Software

Memory	
User memory	512 KB
User memory expansion	512 KB

Front panel	
Function keys	9
System keys	10
Touch screen	-
User LED's	9
System LED's	2

Connections	
PC/Printer port	Yes
PLC port	RS-232, RS-422, RS-485, CL 20 mA
Aux port (fieldbus and Ethernet connection)	Yes, requires optional module
External keyboard port	No
Programming speed	9600 ÷ 38400 bps

Functionality	
Number of variables per page	Unlimited
Dual-driver capability	Yes
Recipe memory	16 KB
Data acquisition and trends	No
UniNet network	Client/Server
Alarms	1024
Event list	256
Alarm info page	Yes
Password	Yes
Battery	CR2430 (3V 270mA Lithium), non rechargeable, user replaceable. Replace with same type or equivalent compatible with the operating temperature of the product
Hardware RTC	Yes
Screen saver	No
Buzzer	No
Power supply voltage	18 ÷ 30 VDC

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Max power consumption	0.25 A at 24 VDC
Fuse	2 A (user replaceable)
Weight	~ 0.9 Kg
Operating temperature	0 ÷ +50 °C
Storage temperature	-20 ÷ +70 °C
Operating and storage humidity	5 ÷ 85 % RH non-condensing
Protection class	IP65 (front panel)

The products are designed for installation in an industrial environment in compliance with the regulations:

Emitted interference	EN 61000-6-4
Noise immunity	EN 61000-6-2

Front Dimensions and Cutout

Faceplate LxH	195x98 mm	7.67x3.85 "
Cutout AxB	174x78 mm	6.85x3.43 "
Cutout depth C	74 mm	2.91 "
Max panel thickness	5 mm	0.20"

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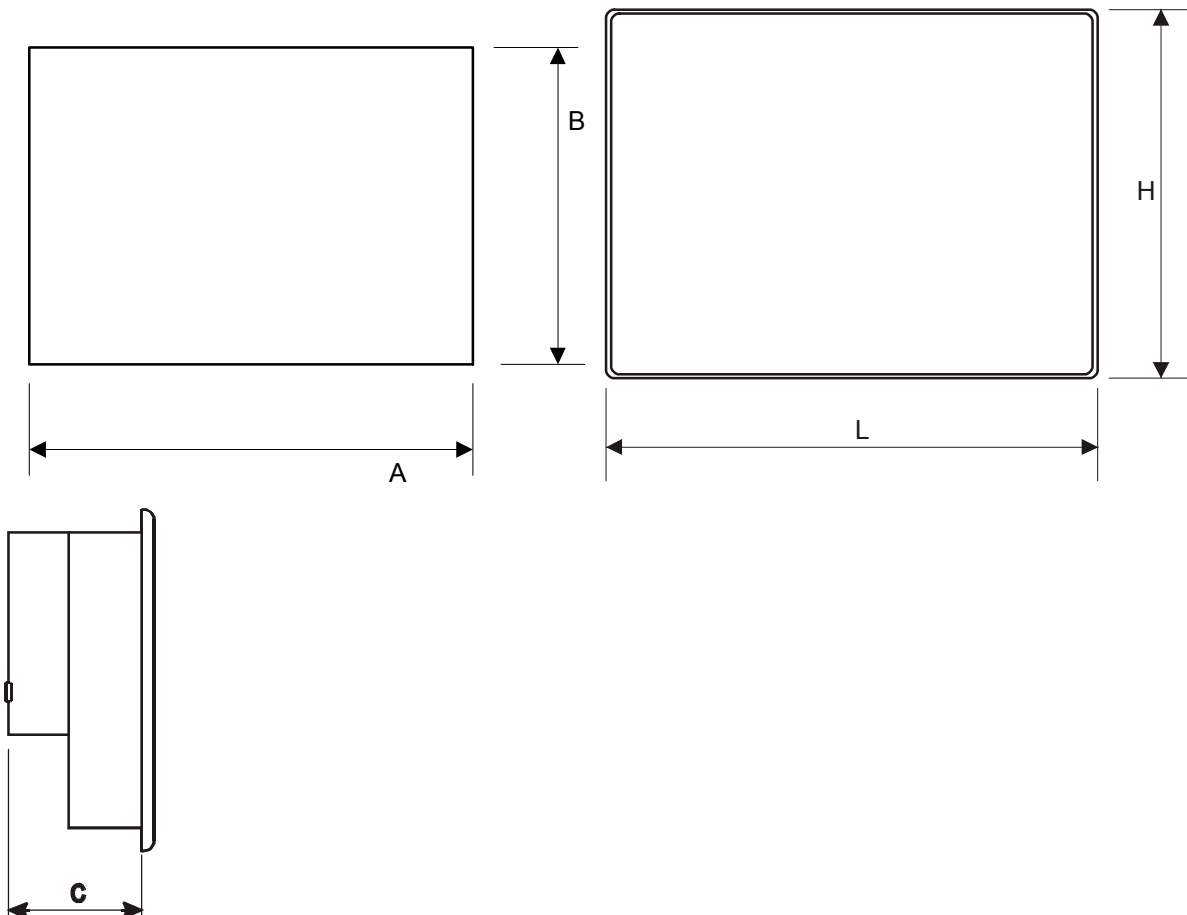
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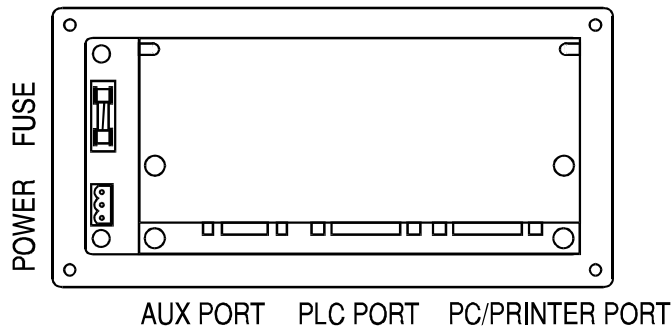
The product is compatible with all standard TCM and SCM modules.
To access the slot for the modules, remove the rear cover of the product

The backup battery is accessible for replacement after removing the main module of the unit.

The standard programming cable CA114 can be used with this product.

Indicators and keypad

There are several dedicated LED indicators on the front panel of the unit. Functions are described in the table below.
A customizable legend strip is included.

Elements not listed in this chapter are reserved for future use.

LED	Color	Status	Meaning
DL	green	OFF	No keys are pressed and no errors
		BLINK	Communication error
		ON	While any key is pressed (visual feedback)
FL	red	OFF	No hardware problem detected; battery OK
		BLINK	Battery low
		ON	Hardware fault

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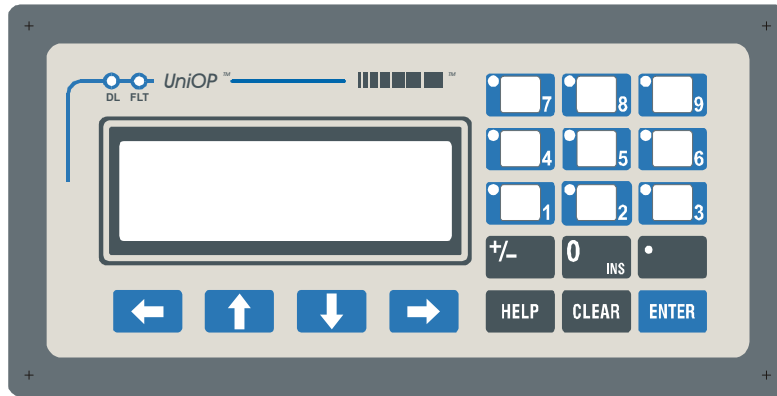
The RDA mapping of LED indicators is shown in the table below.

RDA Bit	LED on Key
L18	1
L19	2
L20	3
L21	4
L22	5
L23	6
L24	7
L24	8
L26	9

The RDA mapping of all keys is standard.

Function keys associated to keys 1 to 9 have a slide-in legend. Legend strips in laser printable form are available as accessories.

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Ordering Information

MD02R-04-0045	Compact low-cost HMI with 4x20 LCD display
R-PRINT2297	Printable legends (5 A4 foils, 8 sets of legends per foil)

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