

Control Panel Indicator

The compact, easy-to-read indicator for your control room mimic panel

The Control Panel Indicator (CPI) displays all inventory information from Enraf's field instruments on a bright back-lighted LCD with four rows of 20 characters each. Configuration of the indicator is easy via eight functional keys on the front panel and an easy to read menu.

Three modes for uninterrupted data availability

- **Stand alone mode**
The indicator interrogates and directly reads the connected field instrument.
- **Listening mode**
The indicator listens to the communication between the field instruments and the remote system, updating its display each time the corresponding gauge transmits its data.
- **Optional fall back mode**
As with the listening mode, the indicator listens to the gauge/system communication. When the communication fails, the indicator automatically takes over. When the transmission returns to normal, the indicator immediately reverts to the listening mode.

Several easy selectable display windows are available for:

- Level
- Temperature
- Interface level
- Density
- Other measurements

The display can be configured to indicate metric or English/American dimensions. Most data can be displayed as normal size or large size.

The soft keys on the front panel provide multiple functions including:

- Repeatability test
- Lock test
- Block and unlock
- Display test
- Select & step through
- Enter

The communication between the CPI and field instruments is a reliable digital transmission system. Received data are continuously checked and, in case of an unforeseen failure, an error code is shown.



This guarantees reliable and correct data transfer as required for Weights and Measures approved installations.

The compact design makes it possible to install the indicators densely packed in mimic panels.

The panel cut out is identical to that of the previous series Enraf indicators (series 823,826 and 856) which makes upgrading existing installations easy and economical.

Accurate & integer



Benefits

- User configurable
- Easy remote gauge testing
- Prevents access by unauthorized personnel
- Galvanically isolated
- Size compatible with earlier generation Enraf panel indicators
- Optional fall-back mode



Enraf

Technical specifications

Control Panel Indicator

Display

Type	: Supertwist LCD with back-light, contrast adjustable 4 lines, 20 alphanumeric characters per line
Character size	: Normal size, 2.95 mm x 4.75 mm (0.12" x 0.2")
Decimal separator	: Period "." or comma ",", selectable

Function keys

Type	: 8-key touch panel
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Mechanical

Dimensions, front (w x h)	: 120 mm x 105 mm (4 3/4" x 4 1/8")
Length indicator	: 368 mm (14 1/2")
Panel cut-out (w x h)	: 106.5 mm x 91.5 mm (4 3/16" x 3 5/8")
Weight	: 3.6 kg (7.2 lb)

Environmental

Ambient temperature	: - 10 °C to + 60 °C (- 26 °F to + 140 °F)
Protection class	: IP20, for indoor use
Safety	: Galvanically isolated from field transmission lines

Materials

Housing	: Stainless steel
Front	: Semi-mat polyester with transparent window, colour RAL 7030

Electrical

Power supply	: 110/130/220/240 V~ (+ 10 % to - 20 %), optional 65 V~ (+ 10 % to - 20 %)
Frequency variations	: 45 Hz to 65 Hz
Power rating	: 25 VA, I _{max} = 2 A
Isolating voltage	: > 1.200 V
Lightning protection	: Full galvanic separation via isolating transformers

Transmission

Type	: Serial, ASCII coded, Bi-phase Mark Modulated (BPM), Enraf GPU protocol
Baud rate	: Selectable 1200 baud or 2400 baud
Cabling	: Two conductors, twisted pair, shielded, R _{max} = 200 Ω / line, C _{max} = 1 μF,

Operational modes

Three off	: Stand alone Listen Fall-back
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Options

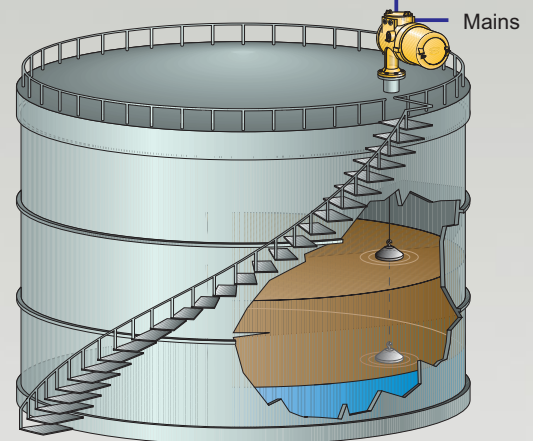
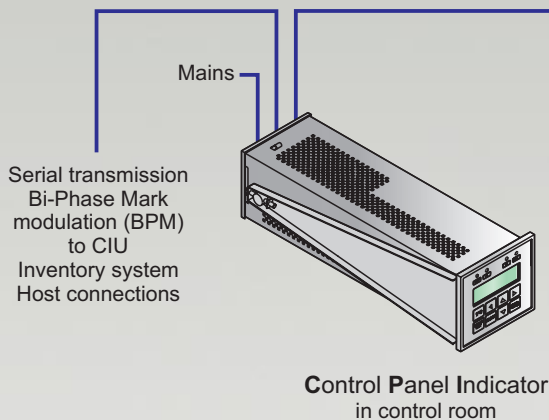
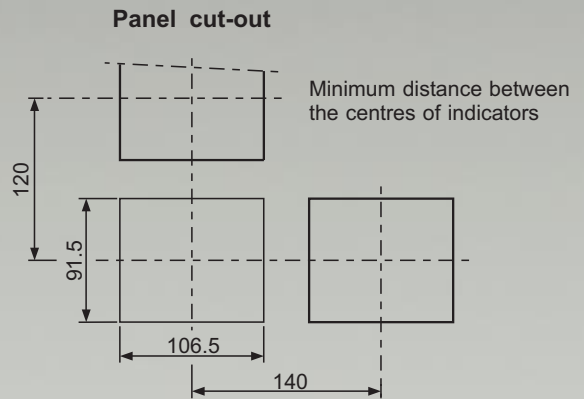
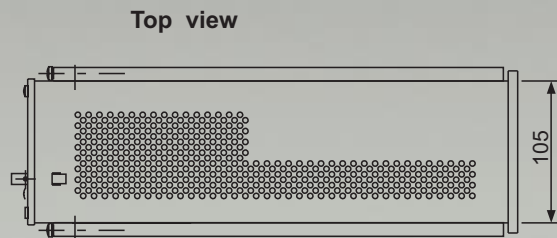
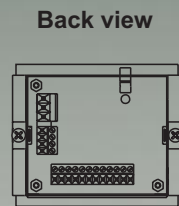
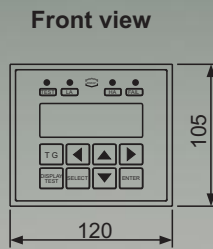
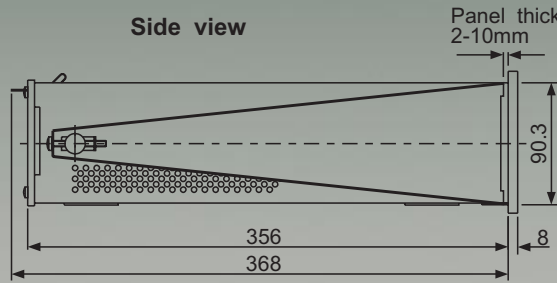
Alarm relay output	: 2 x SPDT, galvanically isolated, V _{max} = 250 V, I _{max} = 3 A, 500 VA
Fall back relay	: Adjustable transmission time out 0 - 29,5 min, self polling, restarts on gauge restart

Display and keyboard

Displayed data	User selectable	Tank number or product name Gauge address, messages and alarm status Temperature with dimension and status Level and interface level with dimensions and status Density with dimension and status Level & interface level Temperature Density	Standard & large display Standard & large display mm, ft,in, /16 °C, °F kg /m ³ , °API, lb/ft ³
Dimensions		Repeatability test for servo gauge Lock test Block Unlock Display test Select & step through key(s) Enter	TG LT BL UN DISPLAY TEST SELECT ◀▶▶▼ ENTER
Function keys	8 membrane keys	Repeatability test activated Low level alarm High level alarm Fail alarm Two transmission indicators, transmit & receive	TEST LA HA FAIL RXD & TXD
Indication lights	6 LEDs		

Pos 1 Application	
U	General purpose
X	With sealing facilities
Pos 2 Data transmission	
E	Serial transmission, Bi-Phase mark Modulated (BPM)
Pos 3 Alarm output	
W	With alarm relays
Z	Without alarm relays
Pos 4 Fall-back relay	
F	With fall-back relay
Z	Without fall-back relay
Pos 5, 6, 7 Instrument designation	
8	8
7	8
8	8
Pos 8 Power supply	
A	220 V 50/60 Hz
C	110 V 50/60 Hz
K	240 V 50/60 Hz
R	130 V 50/60 Hz
S	65 V 50/60 Hz

U	E	Z	Z	8	7	8	A	Typical identification code
E				8	7	8		Your identification code



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