

INTRODUCTION

The Universal Indicator N480i is complete and yet easy-to-use instrument which holds in a very popular and compact 1/16 DIN enclosure the great accuracy and flexibility only found in the high end digital process meters.

It is a low-cost instrument which can be easily installed and operated. It accepts most thermocouples and Pt100 RTD, linear signals as 4 to 20 mA and millivolt.

Full rangeability and decimal point configuration from the keypad are basic features that make this instrument easily configured by non-experienced users.

Dual alarm relays with six alarm functions and a 24 Vdc output for remote transmitters excitation are options that complete this simple yet complete instrument.



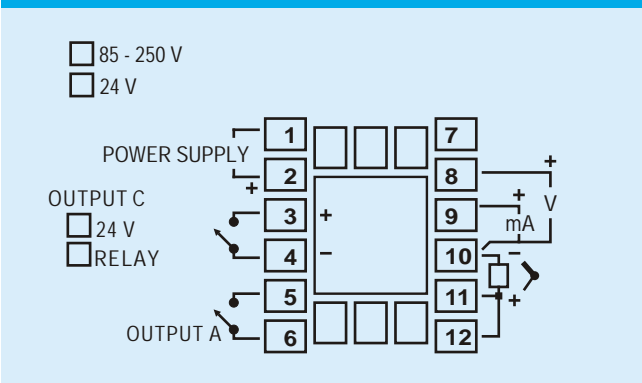
FEATURES

- Accepts thermocouples type J, K, T, E, N, R, S, B, Pt100 RTD, 4-20 mAdc, 0-50 Vdc e 0-10 Vdc without any hardware change or recalibration.
- 2 alarms with programmable functions.
- Alarm outputs: 2 SPST relays (1 NO contact).
- Alarm functions: LO, HI, differential, differential LO, differential HI and sensor break
- Universal switching power supply guarantees high accuracy even under severe mains power oscillations.
- Optional: 24 Vdc power output for remote transmitters excitation.
- Detects any sensor failure condition.
- Features internal auto-zero and auto-range function maximum measurement stability.
- Simplified operation menu turns programming into an easy-to-do task.
- Working range can be easily programmed from keypad.
- Indelible eight-digit electronic serial number can be viewed at the display.
- Silicone rubber keypad.
- Front panel: IP65, Polycarbonate UL94 V-2.
- Back panel: IP30, ABS+PC UL94 V-0.
- Circuitry can be removed without disconnection wiring.
- Flame retardant polycarbonate enclosure.
- Popular 1/16 DIN size.

MODELS

N480i	—————>	Only indicator
N480i	— R ———>	1 relay
N480i	— RF ———>	1 relay + 24 Vdc Power Output
N480i	— RR ———>	2 relays

ELECTRICAL CONNECTIONS



SPECIFICATIONS

- Accepts thermocouples type J (FeCo), type K (Ni-CrNi), T (CuCo), E (NiCo), N, R (PtRh-Pt 13%), S (PtRh-Pt10%), B (PtRh-Pt 30%), with cold junction compensation.
- Accepts 2 or 3-wire Pt100 RTD, range -200°C to 530°C, with cable resistance compensation.
- Pt100 excitation current: 170 µA.
- Internal A/D resolution: 15000 levels.
- Displayed resolution: 7500 levels.
- Four-digit 10 mm red display for measured variable and four-digit 7 mm green display for setpoint.
- Sampling rate: 10 measurements per second.
- Dual SPST 3 A @ 250 Vac alarm relay output.
- Power: 85 to 250 Vca, 50/60 Hz; optional 24 Vdc/ac.
- Consumption: 3VA maximum.
- Operating environment: 0 to 55°C, 20 to 95% RH.
- Dimensions: 48 x 48 x 110 mm (1.89"x1.89"x4.33").
- Panel cutout: 45.5 mm x 45.5 mm.
- Weight: 130 g (basic), 150 g with 2 relays.

SENSOR TYPES AND RANGES

TYPE	CHARACTERISTICS
Thermocouple J	-50 to 760°C (-58 to 1400°F)
Thermocouple K	-90 to 1370°C (-130 to 2498°F)
Thermocouple T	-100 to 400 °C (-148 to 752°F)
Thermocouple E	-30 to 720°C (-22 to 1328°F)
Thermocouple N	-90 to 1300°C (-130 to 2372°F)
Thermocouple R	0 to 1760°C (32 to 3200°F)
Thermocouple S	0 to 1760°C (32 to 3200°F)
Pt100 (0.1°C Resolution)	-199.9 to 530.0°C (-199.9 to 986.0°F)
Pt100 (1°C Resolution)	-200 to 530°C (-328 to 986°F)
4 to 20 mA	Linearized as J. Max. range -110 to 760°C
4 to 20 mA	Linearized as K. Max. range -150 to 1370°C
4 to 20 mA	Linearized as T. Max. range -160 to 400°C
4 to 20 mA	Linearized as E. Max. range -90 to 720°C
4 to 20 mA	Linearized as N. Max. range -150 to 1300°C
4 to 20 mA	Linearized as R. Max. range 0 to 1760°C
4 to 20 mA	Linearized as S. Max. range 0 to 1760°C
4 to 20 mA	Linearized as Pt100. Max. range -199.9 to 530.0°C
4 to 20 mA	Linearized as Pt100. Max. range -200 to 530°C
0 to 50 mV	Linear. Programmable range -1999 to 9999
4 to 20 mA	Linear. Programmable range -1999 to 9999
0 to 10 V	Linear. Programmable range -1999 to 9999