



Wall Mount Universal Temperature & Process Indicators

- ✓ High Visibility 6-Digit LED Display
- ✓ Universal Inputs
- ✓ 0.1% Input Measurement Accuracy
- ✓ NEMA-4X (IP66) Wall/Pipe Mounted Weatherproof Enclosure
- ✓ Analog, Relay and Logic Outputs Are Standard
- ✓ Transmitter Power Supply
- ✓ RS-485/RS-422 Digital Communications
- ✓ Low Voltage Power Option
- ✓ Totalization

The DP3410 universal wall mounting indicator is a highly versatile 6-digit industrial display indicator, with the capability of measuring and indicating temperature, pressure, flow, level and other process variables. The standard DP3410 provides a retransmission output and two alarm relays. Users also have the option of adding RS-485 digital communications to suit their application.

With NEMA-4X/IP66 protection standard and superior RF immunity, the DP3410 has been designed to provide reliable indications in the harshest environments.

Specifications

Display: High-intensity 7-segment, 1 x 6-digit LED display, three alarm LED indicators

Display Range:

Process Value: -9999 to +99999
Totalization: 0 to 999999

Display resolution: ±1 digit

Display Height: 14 mm (0.56 in)

Configuration: User-defined via front panel or software

Model DP3410

\$550

Shown



DP3410 Shown
With Pipe
Mounting Kit:
3440A-Kit, \$75

Shown smaller
than actual size

Standard Functions

Totalizer: 6-digit, batch and secure totals

Alarms:

Three user-defined
Types: High/low process, High/low latch, Fast/slow rate

Math Function: Maximum and minimum value detection, Average value calculation

Analog Input

Input Sampling Rate: 250 ms

Type: Universally configurable to provide: thermocouple, RTD, millivolt, current, and dc volts

Input Impedance:

mA 100 Ω

mV, V >10 MΩ

Linearizer Functions:

Programmable for: SqRoot, Thermocouple types B, E, J, K, N, R, S, T or Pt100 RTD's.

Custom 20-breakpoint linearizer, set up by PC software

Broken Sensor Protection:

Upscale drive on thermocouple and RTD; Downscale drive on milliamps and voltage



Cold Junction Compensation:

Automatic CJC incorporated as standard, Stability < 0.05°C/°C change in ambient temperature

Input Protection: Common mode isolation > 120 dB at 50/60 Hz with 300 Ω imbalance resistance, Series mode rejection > 60 db at 50/60 Hz

Transmitter Power Supply:

24 Vdc, 30 mA max. to power one 2-wire transmitter

Outputs

Retransmission:

Analog, configurable in the range of 4 to 20 mA, Max. load: 15 V (750 Ω at 20 mA)

Accuracy: ≤ 0.25% of span

Isolation: 500 Vdc from input (not isolated from logic output)
Assignable to Process Variable or Average PV

Logic Output:

Rating: 18 Vdc at 20 mA
Min. load: 400 Ω

DISCONTINUED PRODUCT

Types and Ranges

Input	Range	Accuracy (% of reading)
J Iron-Constantan	-100 to 900°C -140 to 1650°F	0.1% or ±0.5°C
K CHROME [®] -ALOMEGA [®]	-100 to 1300°C -140 to 2350°F	0.1% or ±0.5°C
T Copper-Constantan	-250 to 300°C -400 to 550°F	0.1% or ±0.5°C
E CHROME [®] -Constantan	-100 to 900°C -140 to 1650°F	0.1% or ±0.5°C
N OMEGALLOY [®]	-200 to 1300°C -325 to 2350°F	0.1% or ±0.5°C
R Pt-13%Rh/Pt	-18 to 1700°C 0 to 3000°F	0.1% or ±1.0°C (above 300°C)
S Pt-10%Rh/Pt	-18 to 1700°C 0 to 3000°F	0.1% or ±1.0°C (above 200°C)
B Pt-30%/Rh Pt-6%/Rh	-18 to 1800°C 0 to 3270°F	0.1% or ±2.0°C (above 200°C)

Input	Maximum Range	Accuracy (% of reading)
RTD Pt100	-200 to 600°C -325 to 1100°F	0.1% or ±0.5°C

Linear Inputs	Range	Accuracy (% of reading)
Current	0 to 20 mA	0.2% or ±2 µA
Current	4 to 20 mA	0.2% or ±2 µA
Voltage	0 to 5 V	0.1% or ±200 µV
Voltage	1 to 5 V	0.1% or ±200 µV
Voltage	0 to 50 mV	0.1% or ±20 µV

Input	Range	Accuracy (% of reading)
Square Root	4 to 20 mA	0.2% or ±2 µA

Notes: Performance accuracy is not guaranteed at extreme low end of thermocouple ranges. RTD, 3-wire platinum, 100 ohm per DIN 43760 standard (IEC751), with range of 0 to 400 ohm. Min span below zero: Type T: 70°C/126°F, Type N: 105°C/189°F; T/C standards: DIN 43710 IEC 584

To Order (Specify Model Number)		
Model Number	Price	Description
DP3410	\$550	Indicator with 85 to 265 Vac (M20 cable glands)
DP3411	550	Indicator with 85 to 265 Vac (NPT cable glands)
DP3410-24VDC	635	Indicator with 24 Vdc power (M20 cable glands)
DP3411-24VDC	635	Indicator with 24 Vdc power (NPT cable glands)

Communications Options- Not Field Installable

Ordering Suffix	Price	Description
-1	\$95	RS-485/RS-422 communications

Accessories

Model Number	Price	Description
3440A-KIT	\$ 75	Pipe mounting kit
CN34-SW*	150	Software package

Ordering Example: DP3410-1, wall mount indicator with 2 relays, 1 digital input, 4 to 20 mA retransmission, logic output, and M20 cable glands standard + optional RS-485 digital communications, \$550 + 95 = **\$645**
OCW-1 OMEGACARESM extends standard 3-year warranty to a total of 4 years (\$64), \$645 + 64 = **\$709**

Model DP3410
Shown with optional pipe mount

Isolation: 500 V from input (not isolated from retransmission output)
 Relay output: 2 relays standard Rating (SPDT) 5 A at 115/230 Vac
 Function: Alarms, totalizer count pulse, totalizer wrap pulse or end of batch alarm

Digital Input Type: Volt-free, Minimum pulse 250 ms
MODBUS Serial Communications: Connections: RS-422/RS-485, 2- or 4-wire
 Speed: 2.4 k or 9.6 k baud rate
 Protocol: MODBUS RTU slave

Physical Dimensions: 160 W x 250 H x 68 mm D (6.3 x 9.84 x 2.68")

Electrical Voltage: 85 to 265 Vac 50/60 Hz, 24 Vdc (optional)

Power Consumption: < 6 VA ac
 < 5 W dc

Power Interruption Protection: < 60 ms/< 3 cycles, no effect
 > 60 ms/>3 cycles, instrument returns to operation after a controlled reset

Environmental Operating Limits: -10 to 55°C (32 to 131°F)
 5 to 95% RH non-condensing

Temperature Stability: < 0.02% of reading or 2 µV/°C (1 µV/°F)

Enclosure: NEMA-4X/IP66
Weight: 2 kg (4.5 lb)

Companion panel meter: CN3409 Series ½ DIN available in this section



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UNITED STATES

www.omega.com
1-800-TC-OMEGA
Stamford, CT.

CANADA

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• pH and Conductivity

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