# K3N Series Digital Panel Meters


OMRON

*Giving you every advantage.*

**Omron's K3N series of panel meters are competitively priced and designed for maximum benefit, giving users unrivaled programming flexibility and clarity of display.**

These units carry Omron's signature long service life and high quality with new aesthetic and performance features.

On the aesthetic side, the most readily apparent feature is the larger, brighter display. The combination of three distinct colors (red, green and orange) quickly draws attention to the display and the larger digits make it easier to read.

FEATURES

***features***

Contemporary front panel design with NEMA4 rating and CE approval

Large, durable and responsive operation keys

5 digit LED display (-19999 to 99999)

Finger Protection on terminal blocks conforming to VDE 106


***three different LED colors:***

**RED:** Process value display; Comparative output status indicator (HH/LL bank)

**ORANGE:** Set value display status; Comparative output status indicator (H/L bank); Status indicators, Teaching indicators

**GREEN:** Set value display, Comparative output status indicators (PASS bank); Simplified user interface

LED COLORS

These carefully designed, aesthetic improvements provide operators with a ready source of precise information, reduce errors and empower them to perform pre-authorized parameter changes through the maintenance mode and tare function. These panel meters give operators more information and freedom without compromising any parameter settings. Flexibility of field calibration and local processing provide even more operator benefits.

## Flexibility and Omron's Advantages

**D**esigned with multiple applications and environments in mind, the K3N series of panel meters is the answer to several different applications. Your operator will have greater connectivity and flexibility through a combination of different communications options (RS-232C, RS-422 and RS-485) and direct access to all functions through the front panel. On top of the flexibility, the K3N panel meters are tough enough to endure harsh environments and convenient enough to be practically applied to changing demands.

Everything about these panel meters is designed around speed, accuracy and convenience. These units have a quick start-up compensation time (from 0.0 to 99.9s), a built-in 80 mA power supply specifically designed for powering sensors, field calibration, and remote and local processing. This provides a solid practical base for integration into an existing process.

Achieve consistently accurate results with the K3N panel meters regardless of the inputs. You can define the sampling period (the "simple" setting) or have the unit automatically take continuous readings (the "moving" setting) for a higher level of precision.

The maintenance mode lets you customize the parameters of the default setting. This setting, accessible through the front panel, will save time and eliminate operator error during changeovers. Pushing one button will return the unit to the original set values. The tare (forced-zero) is set via the front panel as well as the maximum/minimum value data reset.

Even with all of the functions being accessible through the front panel, the integrity of the set parameters is protected by the security mode. This function is set via communications and provides a convenient method of limiting options available to operators without hindering their ability to adapt to changing circumstances.

## K3NX Process Meter

- ±0.1% FS
- Multi-range function allowing a wide input range
- Scaling function lets you define values of input signals
- Forced-zero function
- 80 mA at 12 VDC sensor load

## K3NP Time/Period

***NEW PRODUCT OFFERING***

- Ideal for measuring time intervals
- 50kHz input range yields an accuracy of 0.08% of full scale
- Four comparative outputs and four prescale values
- 80 mA at 12 VDC sensor load

## K3NV Weighing Meter

***NEW PRODUCT OFFERING***

- ±0.1% FS
- Load cell power supply of 100 mA at 10 VDC
- Load cell can be connected to a source of 20 mV/V
- The tare function, accessed through the front panel, allows quick zero adjustment at the reference position
- 100 mA at 10 VDC sensor load

## K3NR Frequency/Rate Meter

- Up to 50-kHz input
- Seven different operating modes
- Accepts dual inputs
- Banks with four comparative outputs and four prescale values
- Displays units of actual parameters
- Accuracy to 0.006% of full scale
- 80 mA at 12 VDC sensor load

## K3NH Temperature Meter

- Accepts thermocouple, RTD and analog inputs
- Accepts 14 different types of sensors, currents and voltages
- 100 ms sampling for analog input
- °C/°F display selection
- Input shift

## K3NC Up/Down Counting Meter

- Up to 50-kHz counting
- Prescaling
- Up/Down counting mode
- Excellent for high-speed processing
- Available five-stage comparative output
- Banks with four set and four prescale values
- 80 mA at 12 VDC sensor load

# For Integrated Sensing Solutions—Omron Makes Sense

## Z4M-WR

**Laser Displacement Sensor**

- Visible beam eliminates the need for Z49 safety kit
- Two measurement ranges available: 40 mm and 100 mm
- Automatic sensitivity selection minimizes sensing errors caused by color change

## Z4LA

**Laser Measurement Sensor**

- Wide, thru-beam laser sensor with 5 micron resolution
- Both linear and discrimination outputs available for inspection and control
- Conforms to IEC class 3b and FDA class IIIB standards with optional safety kit Z49-SF1

## E2CA

**Inductive Displacement Sensor**

- Linear 4 to 20 mA output for distance from object to sensor
- Accurate to 0.6 micron
- AC and DC amplifiers available
- Adjustable detecting distance sensitivity

## Z4W-V25R

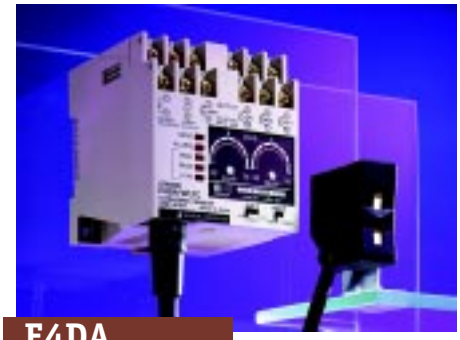
**LED Displacement Sensor**

- 10 micron resolution
- Visible LED light source allows for easy setup and does not require the safety precautions of laser products
- Easy-to-use, built-in amplifier

## D5M

**LVDT Contact Inspection Sensor**

- High repeat accuracy
- 5 mm or 10 mm sensing range
- ±0.5% linearity
- IP67 protection, resists oil and water spray
- Pin plunger or roller plunger actuator



## E4DA

**Ultrasonic Displacement Sensor**

- Narrow beam ultrasonic sensor provides linear analog output
- Ultrasonic beam can detect objects regardless of color
- Amplifier provides three inspection outputs (High/Pass/Low) and analog 4 to 20 mA output

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