

Digital Panel Meters

Navigation Guide



Quick Link
X322
omron247.com



Quick Link
X326
omron247.com



Quick Link
X327
omron247.com



Quick Link
X328
omron247.com

	Advanced Analog				Advanced Digital		
Product Line	K3HB-X	K3HB-V	K3HB-H	K3HB-S	K3HB-C	K3HB-P	K3HB-R
Operation	Indicates Measurements for Voltage/Current Signals	Indicates Measurements Using Load Cell	Indicates Temperature and Process Measurements	High-speed, High Precision Measurement and Discrimination	High-speed Up/Down Counting	Time Interval	Rotary Pulse
Industry	Automotive, Packaging, Waste Water, Semi-conductor, Robotics		Automotive, Packaging, Waste Water, Semi-conductor		Automotive, Packaging, Waste Water, Semi-conductor, Robotics	Automotive, Packaging, Waste Water, Semi-conductor	
Applications	Monitoring Liquid Chemicals, Monitoring current in welding equipment, Motor load current monitoring,	Pressure control for pressure equipment, Measurement of remaining liquids, Measurement hopper of a weight mixer	Industrial Ovens, Industrial Furnaces, Heat Tunnels, Packaging Machines, Molding Equipment, Heat Tunnels	Monitoring Liquid Chemicals, Monitoring current in welding equipment, Motor load current monitoring,	Food & Beverage, Medical Manufacturing, Chemical Manufacturing	Food & Beverage, Medical Manufacturing, Chemical Manufacturing	Food & Beverage, Medical Manufacturing, Chemical Manufacturing
Features	Scaling function, measurement operation selection, averaging, previous average value comparison, forced-zero, zero-limit,output hysteresis, output OFF delay, output test, teaching, display value selection, display color selection, key protect, bank selection, display refresh period, maximum/minimum hold, reset	Scaling function, measurement operation selection, averaging, previous average value comparison, forced-zero, zero-limit,output hysteresis, output OFF delay, output test, teaching, display value selection, display color selection, key protect, bank selection, display refresh period, maximum/minimum hold, reset	Scaling function, measurement operation selection, averaging, previous average value comparison, zero-limit, output hysteresis, output OFF delay, output test, display value selection, display color selection, key protect, bank selection, display refresh period, maximum/minimum hold, reset	Scaling function, 2-input calculation function, measurement operation selection, averaging, previous average value comparison, forced-zero, zero-limit, output hysteresis, output OFF delay, output test, teaching, display value selection, display color selection, key protect, bank selection, display refresh period, maximum/minimum hold, reset	Scaling function, measurement operation selection, output hysteresis, output OFF delay, output test, display value selection, display color selection, key protect, bank selection, display refresh period, maximum/minimum hold, reset	Scaling function, measurement operation selection, output hysteresis, output OFF delay, output test, teaching, display value selection, display color selection, key protect, bank selection, display refresh period, maximum/minimum hold, reset	Scaling function, measurement operation selection, averaging, previous average value comparison,output hysteresis, output OFF delay, output test, display value selection, display color selection, key protect, bank selection, display refresh period, maximum/minimum hold, reset
Panel Size	1/8 DIN	1/8 DIN	1/8 DIN	1/8 DIN	1/8 DIN	1/8 DIN	1/8 DIN
Display Size	7 Segment, LED	7 Segment, LED	7 Segment, LED	7 Segment, LED	7 Segment, LED	7 Segment, LED	7 Segment, LED
Display Range	-19,999 to 99,999	-19,999 to 99,999	-19,999 to 99,999	-19,999 to 99,999	-19,999 to 99,999	-19,999 to 99,999	-19,999 to 99,999
Input Voltage	100-240 VAC, 24 VAC/DC	100-240 VAC, 24 VAC/DC	100-240 VAC, 24 VAC/DC	100-240 VAC, 24 VAC/DC	100-240 VAC, 24 VAC/DC	100-240 VAC, 24 VAC/DC	100-240 VAC, 24 VAC/DC
Input Range	DC: Voltage or Current, AC: Voltage or Current	Load Cell (mV)	RTD,Thermocouple	DC Voltage and Current	No-voltage, Voltage Pulse, Open Collector	No-voltage, Voltage Pulse, Open Collector	No-voltage contact, Voltage pulse, Open collector
Output	Relay, NPN, PNP, Linear Voltage or Current, Sensor Power Supply	Relay, NPN, PNP, Linear Voltage or Current, Sensor Power Supply	Relay, NPN, PNP, Linear Voltage or Current, Sensor Power Supply	Relay, NPN, PNP, Linear Voltage or Current, Sensor Power Supply	Relay, NPN, PNP, Linear Voltage or Current, Sensor Power Supply	Relay, NPN, PNP, Linear Voltage or Current, Sensor Power Supply	Relay, NPN, PNP, Linear Voltage or Current, Sensor Power Supply
Output Boards Needed	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Accuracy Rate	DC: Current/Voltage: $\pm 5^{\circ}\text{C}$ ± 1 digit, AC: Current/Voltage: $\pm 5^{\circ}\text{C}$ ± 10 digit	$\pm 0.1\%$ rdg ± 1 digit max	Thermocouple: ($\pm 0.3\%$ PV or $\pm 1^{\circ}\text{C}$) ± 1 digit max, RTD: ($\pm 0.2\%$ PV or $\pm 0.8^{\circ}\text{C}$) ± 1 digit max	One input: $\pm 0.1\%$ F.S. ± 1 digit	N/A	$\pm 0.08\%$, ± 1 digit	Function F1, F6 $\pm 0.06\%$, ± 1 digit, Functions F2 to F5: $\pm 0.02\%$, ± 1 digit
Comparative output response time	DC input: 100 ms, AC input: 300 ms	100 ms	Thermocouple: 180 ms, RTD: 120 ms	One input: OFF to ON 1 ms max, ON to OFF 1.5 ms max, Two input: OFF to ON 2 ms max, ON to OFF 2.5 ms max	1 ms	2 ms	Functions F1 to F6: 100 ms
Linear output response time	DC input: 150 ms, AC input: 420 ms	150 ms	Thermocouple: 230 ms, RTD: 170 ms	One input: 51 ms; Two inputs: 52 ms	10 ms	10 ms	Functions F1 to F6: 110 ms
No of Alarms	Dependant on selected output board	Dependant on selected output board	Dependant on selected output board	Dependant on selected output board	Dependant on selected output board	Dependant on selected output board	Dependant on selected output board
Communications	RS-232, RS-485	RS-232, RS-485	RS-232, RS-485	RS-232, RS-485	RS-232, RS-485	RS-232, RS-485	RS-232, RS-485
Safety Approvals	cURus, CE	cURus, CE	cURus, CE	cURus, CE	cURus, CE	cURus, CE	cURus, CE
IP Rating	NEMA 4X/IP66	NEMA 4X/IP66	NEMA 4X/IP66	NEMA 4X/IP66	NEMA 4X/IP66	NEMA 4X/IP66	NEMA 4X/IP66

Digital Panel Meters

Navigation Guide



Quick Link
X324
omron247.com



Quick Link
X329
omron247.com



Quick Link
X323
omron247.com



Quick Link
X325
omron247.com

	Standard Function			Multi-Function
Product Line	K3MA-J	K3MA-L	K3MA-F	K3GN
Operation	Process Meter	Temperature Meter	Frequency/Rate Meter	Process Meter
Industry	Automotive, Packaging, Waste Water, Semi-conductor			
Applications	Monitoring Liquid Chemicals, Monitoring current in welding equipment, Motor load current monitoring	Industrial Ovens, Industrial Furnaces, Heat Tunnels, Packaging Machines, Molding Equipment, Monitoring of motor bearings	Food & Beverage, Medical Manufacturing, Chemical Manufacturing	Monitoring Liquid Chemicals, Monitoring current in welding equipment, Motor load current monitoring
Features	Scaling teach function, forced-zero, zero-limit, display color change, OUT type change (upper limit, lower limit, upper/lower limit), average processing (simple average)	Average processing (simple average, OFF, 2/4/8 ops), Setting change lockout, Parameter initialization	Scaling teach function, forced-zero, zero-limit, display color change, OUT type change (upper limit, lower limit, upper/lower limit), average processing (simple average), auto-zero time, startup compensation time, setting change lockout, parameter initialization, display auto-return time	Scaling, pre-scaling, teaching, average processing, forced zero, display color selection, output type selection, key protection, startup compensation timer, hysteresis
Panel Size	1/8 DIN	1/8 DIN	1/8 DIN	1/32 DIN
Display Size	7 Segment, LED	7 Segment, LED	7 Segment, LED	7 Segment, LED
Display Range	-19,999 to 99,999	-1999 to 9999	-19,999 to 99,999	-19,999 to 99,999
Input Voltage	100-264 VAC, 24 VAC/DC	100-264 VAC, 24 VAC/DC	100-264 VAC, 24 VAC/DC	24 VDC
Input Range	0-5 V, 1-5 V, $\pm 5V$, 0-29 mA, 4-20 mA	Thermocouple, RTD	Pulse Input (contact, open-collector or DC voltage)	DC voltage/current: NPN or PNP
Output	2 Relay (5A, @ 250 VAC / 5A @ 30 VDC, SPST-NO)	1 Relay (5A, @ 250VAC / 5A @ 30VDC, SPDT)	2 Relay (5A, @ 250 VAC / 5A @ 30 VDC, SPST-NO)	Note: Output is part number specific. Relay Rating: 1A @30 VDC 2 relay, relay/communication, relay/current, relay/DC voltage, 3 transistor (NPN), 3 transistor (NPN)/communication, 3 transistor (NPN)/DC current, 3 transistor (NPN)/DC voltage, 3 transistor (PNP), 3 transistor (PNP)/communication
Accuracy Rate	$\pm 0.1\%$ FS, ± 1 digit max	Thermocouple or RTD: $\pm 0.5\%$ indication value or $\pm 1^\circ\text{C}$,	$\pm 0.1\%$ FS, ± 1 digit max	$\pm 0.1\%$ FS, ± 1 digit max
Comparative output response time	750 ms	1 s	750 ms	750 ms
Linear output response time	N/A	N/A	N/A	750 ms
Sample Rate	250 ms	500 ms	N/A	250 ms
No of Alarms	0 or 2 (model number specific)	0 or 2 (model number specific)	0 or 2 (model number specific)	2 or 3 (model number specific)
Communications	No	No	No	RS-485
Safety Approvals	cURus, CE	cURus, CE	cURus, CE	UL, CSA, CE, UL508
IP Rating	NEMA 4X/IP66	NEMA 4X/IP66	NEMA 4X/IP66	NEMA 4X/IP66