OMRON

Multifunction Counter Tachometer

H7CX-□-N

The Counter with the Shortest Body in the Industry*
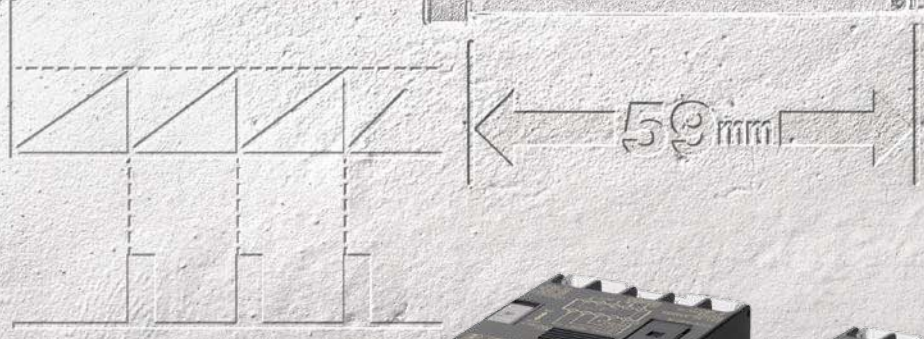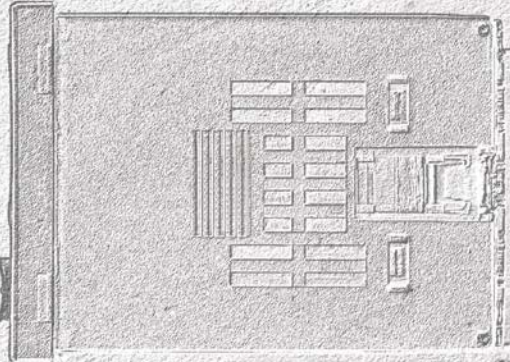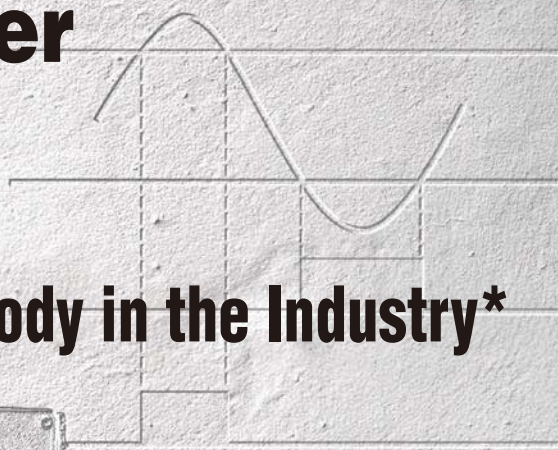
Shortest Body

H7CX-A-series
Multifunction Preset Counter
with Four Digits

H7CX-A-series
Multifunction Preset Counter
with Six Digits

H7CX-R-series
Digital Tachometer

H5CX Digital Timer
Released Simultaneously

realizing

The Most Powerful Counter Ever!
The Tachometers provide even more complete functionality.

We have upgraded the popular H7CX Multifunction Counter/Tachometer. Use it for higher added value in your equipment.

12mm

COUNTER

OUT 12.34

SET 12.34

MODE

OMRON H7CX

Safe and Reliable

Prevent Unexpected Operation

■ **Setting Upper Limit**

Restricting the set time help prevent incorrect settings.

Service Life Notification

■ **Output ON Count Alarm Indication**

The number of times that the control output turns ON is counted and an alarm is displayed when a preset count is exceeded.

More Complete Tachometer Functionality

H7CX-AW□
H7CX-R11□
Added to the Series H7CX-R11W□
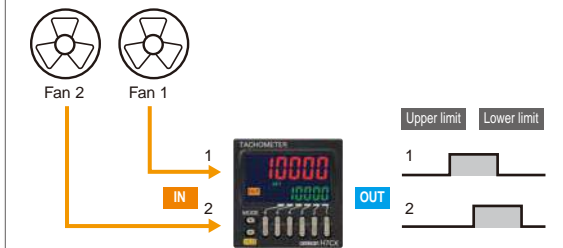
■ **A Wide Range of Input Modes**

New input modes have been added to the new models. Now you can handle a wider range of applications.

(1) One-input measurement
Measurement operation with one input.
Select the HI-LO, AREA, HI-HI, or LO-LO output mode.

(2) Independent Measurement for Two Inputs NEW
Measurement operation with two independent inputs.

Fan 2   Fan 1

TACHOMETER
10000
IN   OUT

1
2

Upper limit   Lower limit
1
2

(3) Differential Input for Two Inputs NEW
Measuring the difference between two inputs (CP1 - CP2).

TACHOMETER
10000
OUT

IN
CP1
CP2

Upper limit   Lower limit
CP1- CP2

(4) Absolute Ratio for Two Inputs NEW
Measuring the ratio between two inputs (CP1/CP2).

(5) Error Ratio between Two Inputs NEW
Measuring the ratio between two inputs ((CP1-CP2)/CP2)).

	1-input measurement	2 independent inputs	Difference between 2 inputs	Absolute ratio between 2 inputs	Error ratio between 2 inputs
H7CX-AW□	○	○	○	○	○
H7CX-R11□	○	—	—	—	—
H7CX-R11W□	—	○	—	—	—

■ **Many Other Useful Functions** NEW

• Peak/Bottom Displays
• Output Hysteresis
• Output OFF delay
• Switching the measurement method (pulse cycle/pulse width)
• Startup time
• Auto-zero time
• Averaging method, number of averaging times
• Prescaling
• Decimal point position
• AMD-compatible mode

Easier to Read

Large Characters

■ **Character Height: 12 mm**

The larger characters and wider viewing angle join a bright display for easy reading even in well-lit locations.

4-digit model   6-digit model

8 12 mm   8 10 mm   New model   Previous model

(actual size)

Easy to read from the top, bottom, and sides.

We increased the number of display segments to make setting parameters even easier.

30Hz → 30Hz (Display example)

Previous OMRON Model   H7CX

Status Monitoring

■ **Orange Added to Switchable Display Colors to Readily Show the Output Status**

Using Green When Output Is OFF   Using Orange When Output Is ON

1856   8000

Green - Orange
Red - Green
Orange - Red, Etc.

*Display colors can be switched only on models with terminal blocks.

Save Space

Make Thinner Panels

■ **A Shorter Body**

The shorter body enables mounting in thin control panels.

59mm

Models with terminal blocks for 12 to 24 VDC. Shortest Body

At only **59** mm, the shortest body for any industrial counter.

Models with terminal blocks for 100 to 240 VAC. Shortest Body

At only **78** mm, the shortest body for any industrial counter that isolates the power supply and input circuits.

*Models with Sockets: 63.7 mm (case dimension)

The above claims apply to counters with a maximum ambient temperature of 55 ºC.
According to OMRON investigations June 2009.

More Complete Lineup

One Unit, Two Counters

■ **Twin Counter Mode**

A Twin Counter Mode has been added to enable using two counters with only one unit.
*Only two-stage models.

Design Flexibility

■ **Replaceable Front Panel**

Replace the front panel with an Optional Front Panel to change the basic color from black to light gray or white.

● **Optional Front Panels let you match the color of the panel or surrounding devices.**

COUNTER 12.34   COUNTER 12.34   COUNTER 12.34

Light gray (sold separately)   Black   White (sold separately)

■ **Waterproof, Dust-proof Structure (UL508 Type 4X and IP66)**

Worry-free application is possible in locations subject to water.
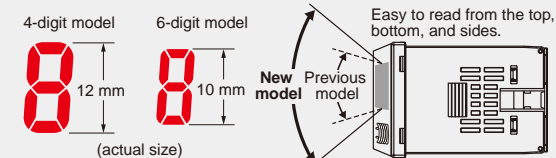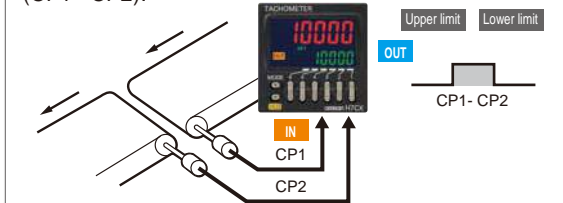
*When the Y92S-29 Waterproof Packing is used.

COUNTER 12.34

Ordering Information

List of Models

Type	Classification	Configuration	External connections	Settings	Display digits	Output	Power supply voltage	Model
NEW H7CX-A Series	Preset counter	• 1-stage preset counter • Total and preset counter	11-pin socket	1-stage	4 digits	Contact output (SPDT)	100 to 240 VAC	**H7CX-A114-N**
						Transistor output (SPST)		**H7CX-A114S-N**
						Contact output (SPDT)	12 to 24 VDC/24 VAC	**H7CX-A114D1-N**
					6 digits	Contact output (SPDT)	100 to 240 VAC	**H7CX-A11-N**
						Transistor output (SPST)		**H7CX-A11S-N**
						Contact output (SPDT)	12 to 24 VDC/24 VAC	**H7CX-A11D1-N**
						Transistor output (SPST)		**H7CX-A11SD1-N**
			Screw terminals		4 digits	Contact output (SPDT)	100 to 240 VAC	**H7CX-A4-N**
						Transistor output (SPST)		**H7CX-A4S-N**
						Contact output (SPDT)	12 to 24 VDC	**H7CX-A4D-N**
						Transistor output (SPST)		**H7CX-A4SD-N**
					6 digits	Contact output (SPDT)	100 to 240 VAC	**H7CX-A-N**
						Transistor output (SPST)		**H7CX-AS-N**
						Contact output (SPDT)	12 to 24 VDC	**H7CX-AD-N**
						Transistor output (SPST)		**H7CX-ASD-N**
		• 1-stage preset counter • 2-stage preset counter • Total and preset counter • Batch counter • Dual counter • Twin counter		2-stage	4 digits	Contact output (SPST + SPDT)	100 to 240 VAC	**H7CX-A4W-N**
						Transistor output (DPST)	12 to 24 VDC	**H7CX-A4WSD-N**
	Preset counter/ Tachometer	• 1-stage preset counter • 2-stage preset counter • Total and preset counter • Batch counter • Dual counter • Twin counter • Tachometer			6 digits	Contact output (SPST + SPDT)	100 to 240 VAC	**H7CX-AW-N**
						Transistor output (DPST)		**H7CX-AWS-N**
						Contact output (SPST + SPDT)	12 to 24 VDC/24 VAC	**H7CX-AWD1-N**
						Transistor output (DPST)		**H7CX-AWSD1-N**
							12 to 24 VDC	**H7CX-AWSD-N**
						Contact output (SPDT)+ Transistor output (SPST)	100 to 240 VAC	**H7CX-AU-N**
						Contact output (SPDT)+ Transistor output (SPST)	12 to 24 VDC/24 VAC	**H7CX-AUD1-N**
						Transistor output (DPST)		**H7CX-AUSD1-N**
NEW H7CX-R Series	Tachometer	• Tachometer	11-pin socket	1-stage (1 input and output)	6 digits	Contact output (SPDT)	100 to 240 VAC	**H7CX-R11-N**
							12 to 24 VDC/24 VAC	**H7CX-R11D1-N**
				1-stage (2 inputs and outputs)		Contact output (SPDT+SPST)	100 to 240 VAC	**H7CX-R11W-N** `Added to the Series`
							12 to 24 VDC/24 VAC	**H7CX-R11WD1-N** `Added to the Series`

Accessories (Order Separately)

Front Panels (Replacement Part)

Color	Model	Applicable Counters
Light gray (5Y7/1)	**Y92P-CXC4G**	4-digit Counter
White (5Y9.2/0.5)	**Y92P-CXC4S**	
Black (N1.5)	**Y92P-CXC4B**	
Light gray (5Y7/1)	**Y92P-CXC6G**	6-digit Counter
White (5Y9.2/0.5)	**Y92P-CXC6S**	
Black (N1.5)	**Y92P-CXC6B**	

Further Information

Refer to these Datasheets for detailed information.

Multifunction Counter/Tachometer **H7CX**
Cat. No. **M079-E1**

Digital Timer **H5CX**
Cat. No. **L113-E1**

Digital Timer **H5CX**
Cat. No. **L111-E1**

Authorized Distributor: