

# SPEC SHEET

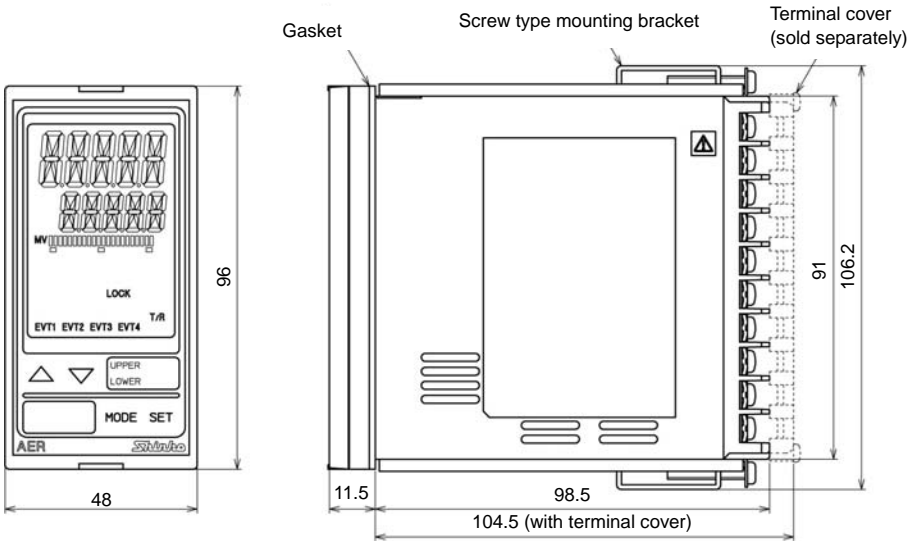
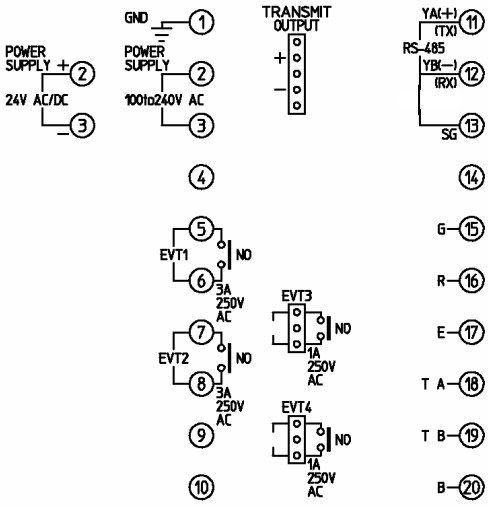
## Digital Indicating pH Meter

AER-102-PH

- Various settings, calibration operable via communication (RS-485)
- 48x96mm square, Panel mounting type



Name	Digital indicating pH meter		
Model	AER-102-PH		
Measurement range	pH value : 0.00 to 14.00pH Temperature : 0.0 to 100.0℃	Resolution: 0.01pH Resolution: 0.1℃	
Repeatability	pH value : ±0.05pH		
Linearity	pH value : ±0.05pH		
Indicating accuracy	Temperature : ±1℃		
Transmission output	<p>Converting pH or temperature to analog signal, and outputs the value in current. (Default value: pH) However, if No Temperature Compensation is selected during the Electrode RTD selection, and if Temperature transmission output is selected, Transmission output low limit value will be outputted. If Transmission output high limit and low limit are set to the same value, Transmission output low limit value will be outputted. Resolution : 1/20000 Output : TA: 4 to 20mA DC (Load resistance: Max 550Ω) Output accuracy : Within ±0.3% of Transmission output span</p>		
Contact output	<p>Relay contact : 1a Control capacity : 3A 250V AC (Resistive load) 1A 250V AC (Inductive load, cosφ=0.4) Electrical life : 100,000 cycles Output action : P control, ON/OFF control</p>		
Calibration function	<p>2-point Automatic or Manual calibration 2-point Automatic calibration: Automatic electrode quality evaluation Standard solution type: pH 2, 4, 7, 9, 10 (JIS) Combination of Standard solution: pH7 (1st solution) and any 2nd solution Manual calibration: 2 types of solution with a difference of 2 pH or more  Temperature calibration (1 point)</p>		
Self-diagnosis	The CPU is monitored by a watchdog timer, and if an abnormal status is found on the CPU, the instrument is switched to warm-up status.		
Temp. compensation element	pH combination electrode sensor (pH sensor: Based on JIS Z8802, Temperature element: Cu500/25℃ or Pt100)		
Temp. compensation range	0.0 to 100.0℃		
Ambient temp.	0 to 50℃		
Relative humidity	35 to 85%RH (Non-condensing)		
Power supply	<p>AER-102-PH : 100 to 240V AC 50/60Hz Allowable fluctuation range: 85 to 264V AC AER-102-PH 1: 24V AC/DC 50/60Hz Allowable fluctuation range: 20 to 28V AC/DC</p>		
Structure	<p>Flush (Applicable panel thickness: 1 to 8mm) Case: Flame-resistant resin, Color: Black Front panel: Membrane sheet Drip-proof/Dust-proof: IP66 (for front panel only)</p>		

Protection structure	Overvoltage category II, Pollution degree 2 (IEC61010-1)
Safety standards	RoHS directive
Dimensions	W48xH96xD110mm Case depth: 98.5mm (when mounted through a control panel)
Dimensions (Scale: mm)	
Terminal arrangement	 <p> <b>Legend:</b>        GND : Ground        POWER SUPPLY : 100 to 240V AC or 24V AC/DC        EVT1 : EVT1 output        EVT2 : EVT2 output        EVT3 : EVT3 output        EVT4 : EVT4 output        TRANSMIT OUTPUT : Transmission output        RS-485 : Serial communication RS-485        G, R ⑮, ⑯ : Electrode sensors        E ⑰ : Shielded wire        T, T ⑱, ⑲ : Temp. compensation sensor terminals (Cu500)        A, B, B ⑱-⑲-⑳ : Temp. compensation sensor terminals (Pt100, 2-wire type: ⑱-⑲ terminals)     </p>