SPEC SHEET

Digital Indicating Conductivity Meter

AER-102- ECL (Low Concentration)

- 48 x 96 mm, panel mounting type
- Drip-proof/Dust-proof IP66 (for front panel only)
- Power supply 24 V AC/DC (user-specified)
- 2-points Contact output (standard), additional 2 points (optional)
- Proportional control, max. 4 points of relay contact



 Various settings 8 	& calibration vi	ia softwar	e comm	nunio	catio	n (RS-485)	(optiona	ıl)					
Transmission out						. ()	(5 11.5.1.5	,					
Name	' '	<u>, </u>	ductivity	, ma	tor								
Model	Digital indicating conductivity meter												
Model	AER - 1	0 2	-EC	L									
	Input po					,	2 point	:S					
								rode conductivi	itv sensor				
1	lan		EC					erature element					
	Input						2-elect	rode conductivi	ity sensor				
							(Temp	erature element	t: Pt1000) (*1)				
	Concent		L			Low co	oncentration						
	Dower	unnly valt	age				100 to	240 V AC (star	ndard)				
	Powers	upply volt			1		24 V AC/DC (*2)						
						C5	Serial	communication	RS-485				
	Option					EVT3	EVT3,	EVT4 outputs ((Contact output 3, 4)				
						TA2		nission output 2	2 (*3)				
						specified at	the time of	ordering.					
		(*2) Power supply voltage100 to 240 V AC is standard. When ordering 24 V AC/DC, enter 1 in Power supply voltage, after ECL. (*3) If Transmission output 2 (TA2 option) is ordered, EVT1 is not available.											
Measurement													
range	les.	4	Cell	I		Cools Day		Desclution	Conductivity Zero				
	Inp	out	Cell Consta			Scale Rar	nge	Resolution	Adjustment Value				
range	Inp	out			0.00			Resolution	Adjustment Value Setting Range				
range	Inp	out				Scale Rar 0 to 2.000 to 20.00	μ _{S/cm}		Adjustment Value Setting Range -0.200 to 0.200				
range	Ing	out			0.00	0 to 2.000	μ _{S/cm}	0.001 μS/cm	Adjustment Value Setting Range				
range	Inp	out			0.00	0 to 2.000 to 20.00	$\mu_{\rm S/cm}$ $\mu_{\rm S/cm}$ $\mu_{\rm S/cm}$	0.001	Adjustment Value Setting Range -0.200 to 0.200 -2.00 to 2.00				
range	Inp	out		ant	0.00 0.00 0.00 0.00	0 to 2.000 to 20.00 to 50.00 0 to 0.200 0 to 2.000	μS/cm μS/cm μS/cm mS/m mS/m	0.001	Adjustment Value Setting Range -0.200 to 0.200 -2.00 to 2.00 -5.00 to 5.00 -0.020 to 0.020 -0.200 to 0.200				
range	Inp	out	Consta	ant	0.00 0.00 0.00 0.00	0 to 2.000 to 20.00 to 50.00 0 to 0.200 0 to 2.000 0 to 5.000	μS/cm μS/cm μS/cm mS/m mS/m	0.001	Adjustment Value Setting Range -0.200 to 0.200 -2.00 to 2.00 -5.00 to 5.00 -0.020 to 0.020 -0.200 to 0.200 -0.500 to 0.500				
range	Ing	out	Consta	ant	0.00 0.00 0.00 0.00 0.00	0 to 2.000 to 20.00 to 50.00 0 to 0.200 0 to 2.000 0 to 5.000 to 2.00 mg	μS/cm μS/cm μS/cm mS/m mS/m mS/m	0.001	Adjustment Value Setting Range -0.200 to 0.200 -2.00 to 2.00 -5.00 to 5.00 -0.020 to 0.020 -0.200 to 0.200 -0.500 to 0.500 -0.20 to 0.20				
range	Ing	out	Consta	ant	0.00 0.00 0.00 0.00 0.00 0.00	0 to 2.000 to 20.00 to 50.00 0 to 0.200 0 to 2.000 0 to 5.000 to 2.00 mg	μS/cm μS/cm μS/cm mS/m mS/m mS/m g/L	0.001	Adjustment Value Setting Range -0.200 to 0.200 -2.00 to 5.00 -5.00 to 5.00 -0.020 to 0.020 -0.200 to 0.500 -0.500 to 0.500 -0.20 to 0.20 -2.0 to 2.0				
range	Ing	out	Consta	ant	0.00 0.00 0.00 0.00 0.00 0.00	0 to 2.000 to 20.00 to 50.00 0 to 0.200 0 to 2.000 0 to 5.000 to 2.00 mg/s	μS/cm μS/cm μS/cm mS/cm mS/m mS/m mS/m g/L	0.001	Adjustment Value Setting Range -0.200 to 0.200 -2.00 to 2.00 -5.00 to 5.00 -0.020 to 0.020 -0.200 to 0.200 -0.500 to 0.500 -0.20 to 0.20 -2.0 to 2.0 -5.0 to 5.0				
range			Consta	ant	0.00 0.00 0.00 0.00 0.00 0.01 0.01	0 to 2.000 to 20.00 0 to 50.00 0 to 0.200 0 to 2.000 0 to 5.000 to 2.00 mg/s 50.0 mg/s to 20.0 mg/s	μS/cm μS/cm μS/cm μS/cm mS/m mS/m mS/m g/L /L	0.001	Adjustment Value Setting Range -0.200 to 0.200 -2.00 to 2.00 -5.00 to 5.00 -0.020 to 0.020 -0.200 to 0.200 -0.500 to 0.500 -0.20 to 0.20 -2.0 to 2.0 -5.0 to 5.0 -2.00 to 2.00				
range	Conduc-	Conduc-	Consta	ant	0.00 0.00 0.00 0.00 0.00 0.01 0.01	0 to 2.000 to 20.00 0 to 50.00 0 to 0.200 0 to 2.000 to 2.00 mg to 20.0 mg to 50.0 mg	μS/cm μS/cm μS/cm mS/cm mS/m mS/m mS/m g/L //L μS/cm	0.001	Adjustment Value Setting Range -0.200 to 0.200 -2.00 to 2.00 -5.00 to 5.00 -0.020 to 0.020 -0.200 to 0.200 -0.500 to 0.500 -0.20 to 0.20 -2.0 to 2.0 -5.0 to 5.0 -2.00 to 2.00 -5.00 to 5.00				
range			Consta	ant	0.00 0.00 0.00 0.00 0.00 0.01 0.01 0.00	0 to 2.000 to 50.00 0 to 0.200 0 to 5.000 0 to 5.000 to 2.00 mg/ 0 50.0 mg/ to 20.00 to 50.00	μS/cm μS/cm μS/cm mS/cm mS/m mS/m mS/m g/L //L μS/cm μS/cm	0.001 μ S/cm 0.01 μ S/cm 0.01 μ S/cm 0.01 μ S/cm 0.001 mS/m 0.001 mS/m 0.001 mS/m 0.01 mg/L 0.1 mg/L 0.1 mg/L 0.01 μ S/cm 0.01 μ S/cm 0.1 μ S/cm	Adjustment Value Setting Range -0.200 to 0.200 -2.00 to 2.00 -5.00 to 5.00 -0.020 to 0.020 -0.200 to 0.200 -0.500 to 0.500 -0.20 to 0.20 -2.0 to 2.0 -5.0 to 5.0 -2.00 to 5.00 -5.00 to 5.00 -5.00 to 5.00				
range	Conduc-	Conduc-	0.01/cr	m	0.00 0.00 0.00 0.00 0.00 0.01 0.00 0.00	0 to 2.000 to 50.00 0 to 0.200 0 to 5.000 to 2.00 mg to 20.0 mg to 20.0 mg to 50.0 mg to 50.0 mg	μS/cm μS/cm μS/cm mS/cm mS/m mS/m mS/m g/L //L μS/cm μS/cm μS/cm μS/cm μS/cm	0.001	Adjustment Value Setting Range -0.200 to 0.200 -2.00 to 2.00 -5.00 to 5.00 -0.200 to 0.200 -0.200 to 0.200 -0.500 to 0.500 -0.20 to 0.200 -2.0 to 2.0 -5.0 to 5.0 -2.00 to 5.00 -5.00 to 5.00 -5.00 to 50.0 -0.200 to 0.200				
range	Conduc-	Conduc-	Consta	m	0.00 0.00 0.00 0.00 0.01 0.01 0.00 0.00 0.00 0.00	0 to 2.000 to 20.00 0 to 0.200 0 to 2.000 0 to 5.000 to 2.00 mg to 20.0 mg to 50.0 mg to 50.00 to 50.00	μS/cm μS/cm μS/cm mS/m mS/m mS/m g/L //L //L μS/cm μS/cm μS/cm mS/m	0.001	Adjustment Value Setting Range -0.200 to 0.200 -2.00 to 2.00 -5.00 to 5.00 -0.020 to 0.020 -0.200 to 0.200 -0.500 to 0.500 -0.20 to 0.20 -2.0 to 2.0 -5.0 to 5.0 -2.00 to 5.00 -5.00 to 5.00 -5.00 to 5.00 -5.00 to 50.0 -0.200 to 0.200 -0.500 to 0.500				
range	Conduc-	Conduc-	0.01/cr	m	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00	0 to 2.000 to 20.00 0 to 0.200 0 to 2.000 0 to 5.000 to 2.00 mg to 20.0 mg to 50.00 mg to 50.00 f to 50.00 f to 50.00 f to 5.000 0 to 5.000 to 5.000 f	μS/cm μS/cm mS/cm mS/m mS/m mS/m g/L //L μS/cm μS/cm S/cm mS/cm mS/cm mS/cm mS/cm mS/cm mS/cm	0.001	Adjustment Value Setting Range -0.200 to 0.200 -2.00 to 2.00 -5.00 to 5.00 -0.020 to 0.020 -0.200 to 0.200 -0.500 to 0.500 -0.20 to 0.200 -2.0 to 2.0 -5.0 to 5.0 -2.00 to 5.00 -5.00 to 5.00 -5.00 to 5.00 -0.200 to 0.200 -0.500 to 5.00 -0.500 to 5.00 -0.500 to 5.00 -0.500 to 5.00 -5.00 to 5.00				
range	Conduc-	Conduc-	0.01/cr	m	0.00 0.00 0.00 0.00 0.01 0.01 0.00 0.00 0.00 0.00 0.00 0.00 0.00	0 to 2.000 to 20.00 0 to 0.200 0 to 2.000 0 to 5.000 to 2.00 mg to 20.0 mg to 50.0 mg to 50.00 to 50.00	μS/cm μS/cm mS/cm mS/m mS/m mS/m g/L //L μS/cm μS/cm μS/cm mS/m mS/cm mS/cm mS/cm mS/cm mS/cm	0.001	Adjustment Value Setting Range -0.200 to 0.200 -2.00 to 2.00 -5.00 to 5.00 -0.020 to 0.020 -0.200 to 0.200 -0.500 to 0.500 -0.20 to 0.20 -2.0 to 2.0 -5.0 to 5.0 -2.00 to 5.00 -5.00 to 5.00 -5.00 to 5.00 -5.00 to 50.0 -0.200 to 0.200 -0.500 to 0.500				

0 to 500 mg/L

0 to 200 mg/L

0.0 to 100.0℃

0.0 to 200.0 µS/cm

0.00 to 20.00 mS/m

1 mg/L

1 mg/L

0.1℃

0.1 *μ*S/cm

0.01 mS/m

-50 to 50

-20 to 20

-20.0 to 20.0

-2.00 to 2.00

(Abbreviation: Temp.: Temperature)

(*) Decimal point place is selectable for temperature input indication.

Repeatability

Conductivity: ±0.5% of measurement span

TDS conversion: ±1.5% of measurement span

1.0/cm

Linearity

Conductivity: ±0.5% of measurement span
TDS conversion: ±1.5% of measurement span

Temp. (*) Pt100 or Pt1000

Indication accuracy Temperature: ±1℃

Temperature Calibration range: -10.0 to 10.0°C Contact output Relay contact: 1a Control capacity: 3 A 250 V AC (Resistive load), 1 A 250 V AC (Inductive load, cos≠0.4) Electrical life: 100,000 cycles. Output action: P control, ON/OFF control Converting conductivity, temperature or MV to analog signal every input sampling period, output the value in current. (Factory default: Conductivity) If Transmission output 1 ligh limit and low limit are set to the same value, Transmission output 1 ligh limit and low limit are set to the same value, Transmission output 1 ligh limit and low limit are set to the same value, Transmission output 1 ligh limit and low limit are set to the same value, Transmission output 1 ligh limit and low limit are set to the same value, Transmission output 2 ligh limit and low limit are set to the same value, Transmission output 2 ligh limit and low limit are set to the same value, Transmission output 2 ligh limit and low limit are set to the same value, Transmission output 1 spen Transmission output 2 ligh limit and low limit are set to the same value, Transmission output 2 ligh limit and low limit are set to the same value, Transmission output 2 ligh limit and low limit are set to the same value, Transmission output 2 ligh limit and low limit are set to the same value, I ransmission output 2 ligh limit and low limit are set to the same value, I ransmission output 3 to 26 V AC (Pactor) Transmission output 3 to 26 V AC (Pactor) Transmission output 3 to 26 V AC (Pactor) Transmission output 4 light and limit are set to the same value, 2 light and limit are set to 3 light and limit are set to 4 V AC (Pactor) Transmission output 3 light and limit are set to 4 light and limit are set to 4 light and limit and limit are set to 4 light and limit are set to 4 light and limit and limit are set to 4 light and limit and limit are set to 4 light and limit and limit are set to 4 light and limit and light and limit are set to 4 light and limit and output 3 light limit and output 3	Conductivity calibration	Setting range of conductivity Zero adjustment value: Refer to the Measurement range.							
Contact output Relay contact: 1a Control capacity: 3 A 250 V AC (Resistive load), 1 A 250 V AC (Inductive load, cosi≠0.4) Electrical life: 100,000 cycles, Output action: P control, ON/OFF control Converting conductivity, temperature or MV to analog signal every input sampling period, output 1 output 1 will be fixed at 4 mA DC. Transmission output 1 high limit and low limit are set to the same value, Transmission output 1 high limit and low limit are set to the same value, Transmission output 2 might be fixed at 4 mA DC. Transmission output 1 high limit and low limit are set to the same value, Transmission output 1 will be fixed at 4 mA DC. Transmission output 2 might be fixed at 4 mA DC. Transmission output 2 might be a might be might	Temperature	Calibration range: -10.0 to 10.0℃							
Electrical life : 100,000 cycles Output action: P control, ON/OFF control Transmission output 1 Converting conductivity, temperature or MV to analog signal every input sampling period, output the value in current. (Factory default: Conductivity) If Transmission output 1 high limit and low limit are set to the same value, Transmission output 1 will be fixed at 4 mA DC. Transmission output 1 high limit and low limit are set to the same value, Transmission output 2 m Factory output 1 will be fixed at 4 mA DC. Transmission output 1 span The CPU is monitored by a watchdog timer, and if an abnormal status occurs, the instrument is switched to warm-up status. Output 2 m Factory Output 2 m Factory Output 3 m Factory Output 4									
Converting conductivity, temperature or MV to analog signal every input sampling period, output 1 and output 1 high limit and low limit are set to the same value, Transmission output 1 high limit and low limit are set to the same value, Transmission output at 1 high limit and low limit are set to the same value, Transmission output at 1 high limit and low limit are set to the same value, Transmission output and 1 high limit and low limit are set to the same value, Transmission output and 1 high limit and low limit are set to the same value, Transmission output a many limit are set to the same value, Transmission output 1 span and 1 high limit and low limit are set to the same value, Transmission output 1 span and 1 high limit and low limit are set to the same value, Transmission output 1 span and 1 high limit and low limit are set to the same value, Transmission output 2 high limit are set to the same value, Transmission output 2 high limit and low limit are set to the same value, Transmission output 2 high limit and low limit are set to the same value, Transmission output 2 high limit and low limit are set to the same value, Transmission output 2 high limit and low limit are set to the same value, Transmission output 2 high limit are set to the same value, Transmission output 2 high limit are set to the same value, Transmission output 2 high limit are set to the same value, Transmission output 2 high limit are set to the same value, Transmission output 2 high limit are set to the same value, Transmission output 3 high value in current. Converting conductivity, temperature or MV to analog signal every input sampling period, output 3 high value in current.		Electrical life: 100,000 cycles, Output action: P control, ON/OFF control							
If Transmission output t high limit and low limit are set to the same value, Transmission output will be fixed 4 m ADC. Transmission output can be indicated with the bar graph. Resolution: 12000. Current: 4 to 20 m ADC (Load resistance: Max. 550 Ω) Output accuracy: Within: ±0.3% of Transmission output 1 span The CPU is monitored by a waterbdog timer, and if an abnormal status occurs, the instrument is switched to warm-up status. Output accuracy: Within: ±0.3% of Transmission output 1 span The CPU is monitored by a waterbdog timer, and if an abnormal status occurs, the instrument is switched to warm-up status. Output accuracy: Within: ±0.3% of Transmission output 1 span The CPU is monitored by a waterbdog timer, and if an abnormal status occurs, the instrument is switched to warm-up status. Output 10 to 0.0°C Ot 50°C (32 to 122°F) Ambient temperature Ambient temperat		Converting conductivity, temperature or MV to analog signal every input sampling period,							
output 1 will be fixed at 4 mA DC. Transmission output can be indicated with the bar graph. Resolution: 12000, Current: 4 to 20 mA DC (Load resistance: Max. 550 Ω) Output accuracy: Within ± 0.3 w of Transmission output 1 span The CPU is monitored by a watchdog timer, and if an abnormal status occurs, the instrument is switched to warm-up status. 1	output 1	outputs the value in current. (Factory default: Conductivity)							
Transmission output can be indicated with the bar graph. Resolution: 12000. Current: 4 to 20 mA DC (Load resistance: Max. 550 Ω) Output accuracy: Within: ±0.3% of Transmission output 1 span The CPU is monitored by a watchdog timer, and if an abnormal status occurs, the instrument is switched to warm-up status. Temperature compensation range Ambient temperature Ambient humidity Ambient humidit									
Resolution: 12000, Current: 4 to 20 mA DC (Load resistance: Max. 550 Ω) Output accuracy: Within ± 0.3% of Transmission output 1 span									
Self-diagnosis The CPU is monitored by a watchdog timer, and if an abnormal status occurs, the instrument is switched to warm-up status.									
Self-diagnosis The CPU is monitored by a watchdog timer, and if an abnormal status occurs, the instrument is switched to warm-up status. Temperature compensation range Ambient temperature Ambient temperature Conservation of the status of the status occurs, the instrument is switched to warm-up status. Power supply Cuser-specified AER-102-ECL: 100 to 240 V AC 50/60 Hz Allowable fluctuation range: 85 to 264 V AC Caser Flance-resistant resin. Color: Black, Front panel: Membrane sheet Dirp.proof/Dust-proof: IP96 (for front panel only) Caser Flance-resistant resin. Color: Black, Front panel: Membrane sheet Dirp.proof/Dust-proof: IP96 (for front panel only) Caser Flance-resistant resin. Color: Black, Front panel: Membrane sheet Dirp.proof/Dust-proof: IP96 (for front panel only) Caser Flance-resistant resin. Color: Black, Front panel: Membrane sheet Dirp.proof/Dust-proof: IP96 (for front panel only) Caser Flance-resistant resin. Color: Black, Front panel: Membrane sheet Dirp.proof/Dust-proof: IP96 (for front panel only) Caser Flance-resistant resin. Color: Black, Front panel: Membrane sheet Dirp.proof/Dust-proof: IP96 (for front panel only) Covervoltage category II. Pollution degree 2 (IEC61010-1) Caser Index Half-dust H									
Instrument is switched to warm-up status.	Self-diagnosis								
Pensation range Ambient temperature Ambient temperature Ambient humidity 35 to 85 %RH (Non-condensing) 36 to 85 %					ŕ				
Ambient humidity 0 to 50°C (32 to 122°F) Ambient humidity Ambient humidity AFR-102-ECL : 100 to 240 V AC 50/60 Hz Allowable fluctuation range: 85 to 264 V AC AFR-102-ECL : 124 V AC/DC 50/60 Hz Allowable fluctuation range: 20 to 28 V AC/DC Structure Flush (Applicable panel thickness: 1 to 8 mm) Case: Flame-resistant resin. Color: Black, Front panel: Membrane sheet Direction structure Flush (Applicable panel thickness: 1 to 8 mm) Case: Flame-resistant resin. Color: Black, Front panel: Membrane sheet Direction structure Flush (Applicable panel thickness: 1 to 8 mm) Case: Flame-resistant resin. Color: Black, Front panel: Membrane sheet Direction structure Flush (Applicable panel thickness: 1 to 8 mm) Case: Flame-resistant resin. Color: Black, Front panel: Membrane sheet Direction structure Flush (Applicable panel thickness: 1 to 8 mm) Case: Flame-resistant resin. Color: Black, Front panel: Membrane sheet Direction structure Case: Flame-resistant resin. Color: Black, Front panel: Membrane sheet Direction structure Case: Flame-resistant resin. Color: Black, Front panel: Membrane sheet Direction structure Case: Flame-resistant resin. Color: Flame sheet Direction structure Case: Flame-resistant resin. Color: Flame sheet Direction structure Case: Flame-resistant resin. Color: Flame sheet Direction structure Case: Flame-resistant resin. Ca		0.0 to 100.0°C	•						
Ambient humidity 35 to 85 %RH (Non-condensing)									
Power supply (user-specified) AER-102-ECI : 100 to 240 V AC 50/60 Hz Allowable fluctuation range: 85 to 264 V AC (user-specified) AER-102-ECI : 24 V AC/DC 50/60 Hz Allowable fluctuation range: 20 to 28 V AC/DC									
AER-102-ECL 1: 24 V AC/DC 50/60 Hz Allowable fluctuation range: 20 to 28 V AC/DC		35 to 85 %RH (Non-	condensing)	All control of the standard from	05 1- 004 1/ 4 0				
Flush (Applicable panel thickness: 1 to 8 mm) Case: Flame-resistant resin; Color: Black, Front panel: Membrane sheet Drip-proof/Dust-proof: IP66 (for front panel only) Overvoltage category II, Pollution degree 2 (IEC61010-1) Serial communication (C5 option) The following operations can be carried out from an external computer. (3) Function change and adjustment, (4) Reading and setting of conductivity, temperature and status, (3) Function change and adjustment, (4) Reading and setting of user save area Cable length 1.2 km (max.), Cable resistance: Within 50 \(\Omega\$ (Terminators are not necessary, but if used, use 120 \(\Omega\$ or more on both sides.) Ine Communication ElA RS-485 Ine Communication Start-stop synchronization Start-stop synchronization Sinko protocol, MODBUS ASCII, MODBUS RTU Code form ASCII, Binary Communication Shinko protocol, MODBUS ASCII, MODBUS RTU Stop bit 1, 2 (Selectable by keypad) Error correction Error detection Parity, Fotis/No parity, Fotis/No parity, Fotis/Code (Selectable by keypad) Error correction Parity, Check, Checksum (Shinko protocol), LRC (MODBUS protocol ASCII), CRC-16 (MODBUS protocol), RCC-16 (MODBUS		AER-102-ECL: 100 t	0 240 V AC 50/60 HZ	Allowable fluctuation ra	ange: 85 to 264 V AC				
Case: Fiame-resistant resin, Color: Black, Front panel: Membrane sheet Drip-proof/Dust-proof: IP86 (for front panel only)		Flush (Applicable po	V AC/DC 30/00 HZ		ange. 20 to 26 V AC/DC				
Drip-proof/Dust-proof: IP66 (for front panel only)	Structure				ane sheet				
Protection structure Overvoltage category Pollution degree 2 (EC61010-1)					and sheet				
Safety standards	Protection structure	Overvoltage category	VII. Pollution degree	2 (IEC61010-1)					
Weight		RoHS directive comp	oliant						
Serial communication C5 option The following operations can be carried out from an external computer. (1) Reading and setting of various set values, (2) Reading of conductivity, temperature and status, (3) Function change and adjustment, (4) Reading and setting of users save area Cable length 1.2 km (max.), Cable resistance: Within 50 Ω (Terminators are not necessary, but if used, use 120 Ω or more on both sides.) Communication EIA RS-485 Communication EIA RS-485 Communication Malf-duplex communication method Communication Start-stop synchronization Start-s				mm (when mounted thro	ough a control panel)				
(1) Reading and setting of various set values, (2) Reading of conductivity, temperature and status, (3) Function change and adjustment, (4) Reading and setting of user save area	Weight		, ,	•	,				
(3) Function change and adjustment, (4) Reading and setting of user save area Cable length 1.2 km (max.), Cable resistance: Within 50 Ω (Terminators are not necessary, but if used, use 120 Ω or more on both sides.)	Serial								
Cable length 1.2 km (max.), Cable resistance: Within 50 Ω (Terminators are not necessary, but if used, use 120 Ω or more on both sides.)									
Recessary, bút if used, use 120 Ω or more on both sides.) Communication EIA RS-485	[C5 option]		and adjustment, (4) F	Reading and setting of us	ser save area				
Communication line EIA RS-485 Communication method Half-duplex communication method Synchronization method Synchronization method Synchronization method Code form ASCII, Binary Communication protocol Selectable by keypad Shinko protocol, MODBUS ASCII, MODBUS RTU Selectable by keypad Data bit/parity 8-bits/No parity, 7-bits/No parity, 8-bits/Even, 7-bits/Even, 8-bits/Odd, 7-bits/Odd (Selectable by keypad) Error correction Command request repeat system Error detection Parity check, Checksum (Shinko protocol), LRC (MODBUS protocol ASCII), CRC-16 (MODBUS protocol RTU) Data Format Communication Protocol Start bit 1 1 1 1 1 1 1 1 1		Cable length	1.2 km (max.), Cab	le resistance: Within 50	Ω (Terminators are not				
Communication method		0	necessary, but if us	ed, use 120 Ω or more o	on both sides.)				
Communication method Half-duplex communication method Communication 9600, 19200, 38400 bps (Selectable by keypad) Start-stop synchronization method Code form ASCII, Binary Communication Shinko protocol, MODBUS ASCII, MODBUS RTU protocol (Selectable by keypad) Data bit/parity 8-bits/Odd, 7-bits/Odd (Selectable by keypad) Stop bit 1, 2 (Selectable by keypad) Error correction Command request repeat system Error detection Parity check, Checksum (Shinko protocol), LRC (MODBUS protocol ASCII), CRC-16 (MODBUS protocol RTU) Data Format Communication Protocol Start bit 1 1 1 1 1 1 Data bit 7 7 (8) (Selectable) 8 Parity Even Even (No parity, Odd) (Selectable) Stop bit 1 1 (2) (Selectable) Stop bit 1 1 (2) (Selectable) Stop bit 1 1 (2) (Selectable) Same as Contact output 3, 4) [EVT3 option] Converting conductivity, temperature or MV to analog signal every input sampling period, output 2 (Factory default: Transmission output 1: Conductivity, Transmission output 2: Transmission output 2 will be fixed at 4 mA DC. Transmission output can be indicated with the bar graph.			EIA RS-485						
method Communication 9600, 19200, 38400 bps (Selectable by keypad) Synchronization method Code form ASCII, Binary Communication Shinko protocol, MODBUS ASCII, MODBUS RTU (Selectable by keypad) Data bit/parity 8-bits/Obact, 7-bits/No parity, 8-bits/Even, 7-bits/Even, 8-bits/Odd, 7-bits/Odd (Selectable by keypad) Error correction Command request repeat system Error detection Parity check, Checksum (Shinko protocol), LRC (MODBUS protocol ASCII), CRC-16 (MODBUS protocol RTU) Data Format Communication Protocol Start bit 1 1 1 1 Data bit 7 7 (8) (Selectable) 8 Start bit 1 1 1 Data bit 7 7 (8) (Selectable) (Selectable) Stop bit 1 (2) (Selectable) Stop bit 1 (2) (Selectable) Stop bit 1 (2) (Selectable) Same as Contact output 3, 4) EVT3 option Converting conductivity, temperature or MV to analog signal every input sampling period, output 2 (Factory default: Transmission output 1 : Conductivity, Transmission output 2 will be fixed at 4 mA DC. Transmission output can be indicated with the bar graph.			Half duploy commu	nication					
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Stop bit		Data bit/parity							
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[EVT3 option] Transmission output 2 [TA2 option] Converting conductivity, temperature or MV to analog signal every input sampling period, outputs the value in current. (Factory default: Transmission output 1: Conductivity, Transmission output 2: Temperature) If Transmission output 2 high limit and low limit are set to the same value, Transmission output 2 will be fixed at 4 mA DC. Transmission output can be indicated with the bar graph.		Same as Contact ou	tput.						
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output 2 [TA2 option] outputs the value in current. (Factory default: Transmission output 1: Conductivity, Transmission output 2: Temperature) If Transmission output 2 high limit and low limit are set to the same value, Transmission output 2 will be fixed at 4 mA DC. Transmission output can be indicated with the bar graph.		Converting conductivity temperature or MV to analog signal every input sampling period							
[TA2 option] (Factory default: Transmission output 1: Conductivity, Transmission output 2: Temperature) If Transmission output 2 high limit and low limit are set to the same value, Transmission output 2 will be fixed at 4 mA DC. Transmission output can be indicated with the bar graph.				is singley orginal ove	,par samping ponou,				
If Transmission output 2 high limit and low limit are set to the same value, Transmission output 2 will be fixed at 4 mA DC. Transmission output can be indicated with the bar graph.									
output 2 will be fixed at 4 mA DC. Transmission output can be indicated with the bar graph.									
Resolution: 12000. Current: 4 to 20 mA DC (Load resistance: Max. 550, Q)		output 2 will be fixed at 4 mA DC. Transmission output can be indicated with the bar graph.							
		Resolution: 12000, Current: 4 to 20 mA DC (Load resistance: Max. 550 Ω)							
Output accuracy: Within ±0.3% of Transmission output 2 span		Output accuracy: Wit	thin ±0.3% of Transr	nission output 2 span					

