ME110NSR (With communication)

- Measurement data transmission, as well as measurement and display of various elements : AC current , AC voltage, active/reactive power, power factor, frequency, active/reactive energy, voltage harmonics, current harmonics etc.
- Easy construction of network systems: CC-Link, Modbus communication

■Specifications

			Multi-measuring instrument			
Model name			ME110NSR-C		ME110NSR-MB	
Phase wire system			1P2W/1P3W/3P3W (Common use)	3P4W	1P2W/1P3W/3P3W (Common use)	3P4W
Measuring elements (accuracy)	Current	Instantaneous value (0.5%)	●×3(1, 2, 3)	●×5(1, 2, 3, N, AVG)	●×3(1, 2, 3)	●×5(1, 2, 3, N, AVG)
		Demand (0.5%)	●×3(1, 2, 3)	●×5(1, 2, 3, N, AVG)	●×3(1, 2, 3)	●×5(1, 2, 3, N, AVG)
	Voltage (0.5%)		●×3(12, 23, 31)	●×4(12, 23, 31, AVG)*1	●×3(12, 23, 31)	●×4(12, 23, 31, AVG)*1
	Power	Instantaneous value (0.5%)	●	●×4(Σ, 1, 2, 3)	●	●×4(Σ, 1, 2, 3)
		Demand (0.5%)	●	●×4(Σ, 1, 2, 3)	●	●×4(Σ, 1, 2, 3)
	Apparent power (0.5%)		–	●×4(Σ, 1, 2, 3)	–	●×4(Σ, 1, 2, 3)
	Reactive power (0.5%)		●	●×4(Σ, 1, 2, 3)	●	●×4(Σ, 1, 2, 3)
	Power factor (2.0%)		●	●×4(Σ, 1, 2, 3)	●	●×4(Σ, 1, 2, 3)
	Frequency (0.5%)		●		●	
	Active energy (1.0%)		○		○	
	Reactive energy (2.0%)		○		○	
	Current harmonics (2.5%)		◎(THD, h1···h13)		◎(THD, h1···h13)	
	Voltage harmonics (2.5%)		◎(THD, h1···h13)		◎(THD, h1···h13)	
Ratings	Rated voltage		110/220V 50-60Hz (Only 220V for 1P3W)	63.5/110~254/440V 50-60Hz	110/220V 50-60Hz (Only 220V for 1P3W)	63.5/110~254/440V 50-60Hz
	Rated current		AC 5A			
Maximum scale	Scale setting		Auto scale display by setting primary voltage/current, active/reactive power scale, power scale single/double deflection			
	Settable standard maximum scale		●Voltage scale 3P3W/1P2W: 150V(110V) Direct 300V(220V) Direct 300V(220V) 600V(440V) → 1500V(1100V) 3000V(2200V) 4500V(3300V) 9000V(6600V) ≀ 750kV(550kV) 1P3W: 300V(220V) Direct only 3P4W · Direct: 100/150V(63.5/110V) 150/300V(110/190V) 300/600V(220/380V) 300/600V(240/415V) 300/600V(254/440V) · With VT: 63.5/110V 100/173V 110/190V 115/199V 120/208V *Instrument rated voltage with VT is fixed at 110V. *Primary voltage should be set with VT.		●Current scale 1P2W : Max scale = 0.5kW×VT ratio×CT ratio 1P3W : Max scale = 1kW×CT ratio 3P3W : Max scale = 1kW×VT ratio×CT ratio 3P4W : Max scale = Specific power×VT ratio×CT ratio ●Reactive power scale : active power scale×1/2 ●Power factor scale : LEAD0.5~1~LAG0.5 ●Frequency scale : 45Hz~55Hz or 55Hz~65Hz	
Alarm setting	Upper limit setting		A, DA, V, W, DW, cosø, var, Hz, HI, HV			
	Lower limit setting		A, DA, V, W, DW, cosø, var, Hz			
	Setting accuracy		±1.0%			
Loading	Input circuit		Voltage circuit : 0.1VA/phase(@110VAC), 0.2VA/phase(@220VAC) Current circuit : 0.1VA/phase			
	Auxiliary power		11VA(@110VAC), 14VA(@220VAC) 6W(@100VDC)			
Communication	Communication		CC-Link communication		RS485 (ModBus) communication	
	Communication system		Broadcast polling system		ModBus RTU	
	Transmission speed		10M/5M/2.5M/625k/156kbps		2400,4800,9600,19200,38400bps	
	Transmission path format		Bus format		Multi-dropped connection	
	Communication distance		50m (10Mbps)~1200m (156kbps)		1000m	
	Number of units connected		Max 42 units (Remote device station)		Max 31 untis	
Back up			Stored In EEPROM (nonvolatile memory) : setting value, max/min value, active/reactive energy			
Auxiliary power			AC100-240V $^{+10}_{-15}$% 50-60Hz/DC75-140V			
Weight			0.5kg	0.5kg	0.5kg	0.5kg
Enclosure			Thermoplastic self-extinguish (UL94V0)			
Operating temperature			-5~50°C (Average operating temperature : below 35°C)			
Operating humidity			85% RH max (no condensation)			
Storage temperature			-20~60°C			
Standard			EN 61010-1/2001, EN61000-6-4/2001, EN61000-6-2/2001			

●	including max, and min. value
◎	including max value
○	counting value

Note *1 : Phase voltage measurable (1N, 2N, 3N)

Remarks : 1. Accuracy of current, active/reactive power is at standard max scale value.
2. When used for 1P2W, accuracy of active power, active power demand & reactive power can exceed 0.5 due to the influence of power factor.
3. When input voltage falls to 11V, voltage related elements are displayed as follows : (Current is measured even when there is no voltage input)
· Voltage, active/reactive power : "0" is displayed.
· Power factor : "1" is displayed.
· Frequency, current/voltage harmonics : "___" is displayed. (For 3P4W, "___" is displayed when they fall to 80V (@ rated voltage110V) or 160V (@ rated voltage 220V).)

How to order

Model name	Phase wire system	English version	Number of units
ME110NSR-C	3P3W	ENGLISH	5 units