



User Manual

RS PRO DIGITAL PANEL METERS

Stock number: 179--7573, 179-7574, 179-7575, 179-7576

EN



1. FEATURES

- STAR (Wye)/ DELTA/1 phase programmable
- PT ratio programmable (V, 3V)
- CT ratio programmable including CT secondary (A, 3A)
- Universal Voltage Input (80 - 550 VAC) and Current Secondary (0.05 to 6A)
- Universal Auxiliary (80 - 300 VAC / DC) supply
- Simultaneous sampling of Volts & Amps
- True RMS measurement

2. UNIQUE FEATURES

- Optional Programmable relay output maximum 2 and tripping time up to 180 seconds.
- 1 channel Analog output (0 to Full Scale/ 4 to 20mA)
- Clearance & creepage distance meets UL 61010 standard
- 1Row, 4digit display
- Auto-scaling of kilo decimal point.
- Compact size and light weight
- Optional RS485

3. KEY FUNCTIONS

Key	In SET (Programming) mode	In RUN (Measurement) mode
Right/UP ↗	To select the value and accept the value (it act as a Right key in programming mode)	To scroll pages in UPWARD direction and view different parameters
DOWN ↘	To edit the value/system types downward in edit mode and scroll through the parameters.	To scroll pages in DOWNWARD direction and view different parameters

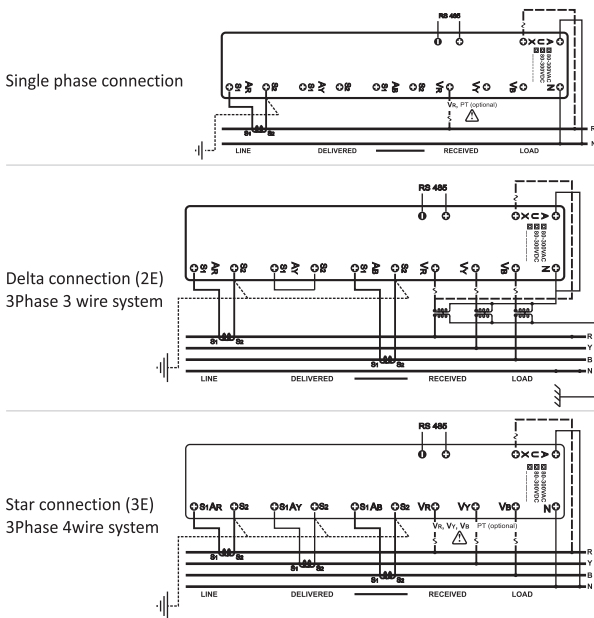
5. LED INDICATION

LED Status	
R - ON	
Y - ON	
B - ON	
K - ON	
RYB - ON	
📶	
LED Status	
R - ON	
Y - ON	
B - ON	
Hz	
RY- ON	
YB - ON	
BR- ON	
K - ON	
RYB- ON	
RYB- OFF	
📶	
LED Status	
K - ON	
📶	

6. ENTERING CONFIGURATION (SETUP) MODE

To configure the setup parameters through front panel, the following steps can be followed.

4. WIRING DIAGRAM



Step	Actions	Display Reads	Range/Options/Comments
1	Press RIGHT & DOWN keys together to enter SETUP	0000 first digit "0" blinking	
2	Press DOWN key to decrement the first digit to "9" sequentially come to digit 1.	1000 first digit "1" blinking.	If any other password is already set press RIGHT and DOWN key to reach the right password
3	Press RIGHT key four times to accept the password.	ELEn ELEMENT Defines the power system configuration	Press RIGHT key to view options. Options: STAR /DELTA/ SINGLE PHASE (Applicable only for 3V, 3A)
4	Press RIGHT key to select STAR/DELTA/1. PHASE	STAR or DELETE or 1Ph selected system blinks	Options can be changed by pressing DOWN key.
5	Press RIGHT key to accept the edited mode	STAR or DELETE or 1Ph Selected system stabilizes	
6	Press DOWN key	PT Primary	Applicable only for V, 3V



7	Press RIGHT key to view PT primary value	415.0 415.0 : Default /factory set	
8	Press RIGHT key to edit the value	415.0 First digit blinks	Edit the digit using DOWN key.
9	Press RIGHT key to accept the edited value for first digit.	415.0 Second digit blinking, can be edited using DOWN key. Press RIGHT key to accept the edited value. Continue the same method till fourth digit	Program Range for PT Primary : 100V to 999kV
10	Press RIGHT key	415.0 Decimal point blinking. Can be set at appropriate location using DOWN key. Ascertain the correct scale (Kilo) is selected by Letter K. Press RIGHT key to accept the edited value.	Ex: To set 11.00kV Set first four digits (1100) as explained above keep pressing DOWN key to place decimal point at appropriate location. K LED indicate Kilo.
11	Press DOWN key	P5EC PT Secondary	Range: 50V to 550V
12	Press RIGHT key to view PT Secondary value	415.0 415.0 : default/factory set.	Repeat steps 8 to 10 to change the settings.
13	Press DOWN key	CP1 CT Primary	Range:0.5A to 99kA Applicable only for A, 3A
14	Press RIGHT key to view CT Primary value	5.000 5.000 : default/factory set. Repeat steps 8 to 10 to change the settings.	
15	Press DOWN key	C5EC CT Secondary	Range: 0.5A to 6A
16	Press RIGHT key to view CT Secondary value	5.000 5.000 : default/factory set. Repeat steps 8 to 10 to change the settings.	
17	Press DOWN key	d0.1P 1st digital output parameter	Press RIGHT Key to view options 1. A & 3A - Under /Over A,dSbL 2. V- Under /Over V,dSbL 3. 3V- Under/Over V,F ,dSbL
18	Press RIGHT key to select the required parameter	d5bL Disable	The required parameter can be selected using DOWN key. Press RIGHT key to accept the selected option.
19	Press DOWN key	d1.6h Digital output 1 threshold value	
20	Press RIGHT key	1000 1000 : Default/Factory set Repeat steps 8 to 10 to change the settings.	Range : 0.001 to 999.9K
21	Press DOWN key	d0.2P 2nd digital output parameter	Press RIGHT Key to view options 1. A & 3A - Under /Over A,dSbL 2. V- Under /Over V,dSbL 3. 3V- Under/Over V,F ,dSbL
22	Press RIGHT key to select the required parameter	d5bL Disable	The required parameter can be selected using DOWN key. Press RIGHT key to accept the selected option.
23	Press DOWN key	d2.6h Digital output 2 threshold value	
24	Press RIGHT key	1000 1000 : Default/Factory set Repeat steps 8 to 10 to change the settings.	Range : 0.001 to 999.9K
25	Press DOWN key	d.dEL Digital Output trip delay time	
26	Press RIGHT Key to view the value	3.000 3.000 : Default/Factory set Repeat steps 8 to 10 to change the settings.	Range: 1 to 180 seconds
27	Press DOWN key	6.8UD baud rate communication speed.	Defines the baud rate.

28	Press RIGHT Key to view the value	9600	Options: 600,1200, 2400,4800,9600, 19.20k. The required value can be selected using DOWN key. Press RIGHT key to accept the selected value.
29	Press DOWN key	P.r.t.Y	Internal communication error check
30	Press RIGHT Key to view the option	E.U.E.n	EUEn (even)/odd (odd)/no(no parity) The required value can be selected using DOWN key. Press RIGHT key to accept the selected option.
31	Press DOWN key	d.u.I.d device ID	Defines the (ID) communications identification number.
32	Press RIGHT Key to view the value	1.000 Repeat steps 8 to 10 to change the settings.	Option:1 to 247
33	Press DOWN key	An.OP Analog output	Press RIGHT Key to view the options Options: 1. A & 3A A, dSbL 2. V- VLL, dSbL 3. 3V- VLL/VLn,F,dSbL
34	Press RIGHT Key to select the option	Blinks the option which was set previously. Press DOWN key to change the options.	Press RIGHT key to accept the selected option
35	Press DOWN key	OFF.F.S Offset value	
36	Press RIGHT Key to view the option	0.t.F.S Press DOWN key to change the options.	Options- 0.t.FS/4.t.20 Press RIGHT key to accept the selected option
37	Press DOWN key	SAU.Y Save YES "Y" blinking	If "n"(no) is selected then Meter enters into RUN mode without affecting any edited Values in the setup

Once the required parameter is programmed press the DOWN key continuously till it reaches SAVE page.

Comment: If value set is above the maximum programmable range, display returns to maximum Programmable value.

7. The List of parameters can be configured and the range is given below

Sl.No.	Parameter	Default setup	Range / Options
1	Connection mode(ELEM)	STAR	STAR/ DELTA/ 1.Phase
2	PT Primary (PT.Pri)	415.0	100V- 999kV
3	PT Secondary (PT SEC)	415.0	50V - 550V
4	CT Primary (CT.Pri)	5.000	0.5A - 99kA
5	CT Secondary (CT SEC)	5.000	0.5A - 6A
6	1st Digital Output parameter (dO1.P)	dSbL	Options mentioned in 19
7	1st Digital Output threshold Value (d.1.th)	1000.	0.001 to 999.9K
8	2nd Digital Output parameter (dO.2.P)	dSbL	Options mentioned in 23
9	2nd Digital Output threshold Value (d.2.th)	1000.	0.001 to 999.9K
10	Digital output trip delay (d.dEL)	3.000	1.000 to 180.0 Sec
11	Baud rate (bAUD)	9600	600 to 19.2K
12	Parity (Prty)	Even	Even/ Odd/ no
13	Device Id (dU.Id)	1.000	1.000 to 247.0
14	Analog output (An.OP)	dSbL	Options mentioned in 33
15	Offset (OFF.S)	0.t.FS	0.t.FS/4.t.20mA

8. Enabling and Disabling of Auto scrolling: (Applicable for 3A, 3V only)

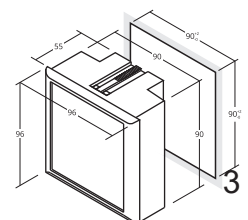
Enabling auto scrolling: Press UP key continuously for 5 seconds or until display shows EnBL for upward scrolling. Press Down key continuously for 5 seconds or until display shows EnbL for downward scrolling.

Disabling auto scrolling: Press any key (UP/DOWN), display show dSbL and returns to normal mode.

9. Mechanical Specification:

Dimension Bezel:
96 x 96 mm (Depth 55mm behind Bezel)

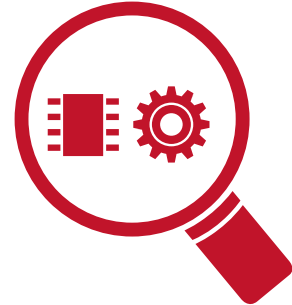
Panel Cutout: 90^{+2}_0 x 90^{+2}_0 mm





AUDITED

In compliance with industry standards



INSPECTED

For guaranteed quality



TESTED

By leading engineers

