



Configuration Guide for the Ranger PM3000

Recommended

Read through this short guide before
configuring your PM3000.

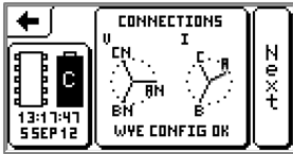


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Configuration Guide for the Ranger PM3000

1. Choose the best configuration for your needs

To help you set up your PM3000 as quickly and easily as possible we have pre-loaded **23 recording configurations** (configs) ready for your immediate use. The default config is on p. 21 of this booklet. If this measures all the parameters you need then you can '**Start Recording**' immediately. If not, choose another and continue to step 2.



2. Communicate with your PM3000

Once you have chosen your config, **power up your PM3000** using your RS232 cable and **communicate** using the touch screen. You can also open communications between your PC and your PM3000 using PMScreen*.

3. Load your chosen configuration

To **load your config** touch 'Continue', 'Next', 'Configure', 'Available Configs'. Scroll down and select your config then click on 'Load'.

4. Hook-up your logger

Next **hook-up your logger** using the hook-up visual on the touch screen or PMScreen for reference. To reach it, touch the 'back' arrow then 'Hook-up' for the correct hook-up visual.

5. Start recording

Once set up, on your touch screen or PMScreen, click the 'back' arrow, then 'Start Recording'. Name your session and click '**Start Now**'.

It's as easy as that!

Remember that if any of these configurations do not match your exact needs, you can either design a new config or tweak any factory config. and save it under a new name for future use.

*PMScreen is the remote user interface that enables you to communicate with your unit through your PC. It is found in the Pronto4w directory, installed from the customer CD.

Configuration Options

Changes that can be made to any configuration, using PMScreen, are:

Physical Hook-up

- Hook-up (10 different physical connection set-ups available)
- Input Channel Calibration

Timings / Memory Mode

- Length of recording (1 sec to as long as you like, 'FIFO')
- First In First Out (FIFO/Recycle) mode
- Delayed Start

Data to be Captured

- Detailed recording method (Adaptive Store/ Point Store)
- Detailed recording channels (functions to be recorded in detail)
- Flicker intervals (short term: 1 - 15 min, long term: 1 - 168 hrs)*

Alarms

- High and Low alarms

* Option available in PM3000HF models only



PM3000 and PM3000HF Factory Configuration Summary Table

Configuration Name	Hook-up	Max Current	Adaptive Store Recording Channels	Detail
All Configurations are set to record for a 7 day period (unless otherwise stated) with FIFO recording mode off. * signifies use in PM3000HF units only				
1Ø 1V 7day	Single Phase	3000 A	1 channel	p. 5
1Ø Full PQ Flkr 7day*	Single Phase	400 A	10 channels	p. 6
1Ø Full PQ Pwr 7day	Single Phase	3000 A	8 channels	p. 7
2Ø 2el Y Pwr 7day	2-Phase 2-Element Wye	3000 A	8 channels	p. 8
3Ø 1el Y Pwr 7day	3-Phase 1-Element Wye	3000 A	5 channels	p. 9
3Ø 2.5el Y Pwr 7day	3-Phase 2.5-Element Wye	3000 A	8 channels	p. 10
3Ø 3el 11kV Flkr 7day*	3-Phase 3-Wire Delta 3el	500 A	16 channels	p. 11
3Ø 3el 11kV THD Flkr 7day*	3-Phase 3-Wire Delta 3el	500 A	16 channels	p. 12
3Ø 3el 33kV Flkr 7day*	3-Phase 3-Wire Delta 3el	500 A	16 channels	p. 13
3Ø 3el 33kV THD Flkr 7day*	3-Phase 3-Wire Delta 3el	500 A	16 channels	p. 14
3Ø 3w D Pwr 7day	3-Phase 3-Wire Delta	3000 A	8 channels	p. 15
3Ø 4w Y 3V 3I 7day	3-Phase 4-Wire Wye	3000 A	6 channels	p. 16
3Ø 4w Y 3V 3I 14day	3-Phase 4-Wire Wye	3000 A	6 channels	p. 17
3Ø 4w Y 3V only 7day	3-Phase 4-Wire Wye	3000 A	3 channels	p. 18
3Ø 4w Y Flkr 7day*	3-Phase 4-Wire Wye	3000 A	16 channels	p. 19
3Ø 4w Y Flkr THD 7day*	3-Phase 4-Wire Wye	3000 A	16 channels	p. 20
3Ø 4w Y Hmnc 7day (Default)	3-Phase 4-Wire Wye	3000 A	12 channels	p. 21
3Ø 4w Y Pwr 7day	3-Phase 4-Wire Wye	3000 A	16 channels	p. 22
3Ø 4w Y Pwr Flkr 7day*	3-Phase 4-Wire Wye	3000 A	16 channels	p. 23
3Ø 4w Y Unbal 7day	3-Phase 4-Wire Wye	3000 A	16 channels	p. 26
U 3V 3I 7day	Uncommitted	3000 A	6 channels	p. 25
U 3V 3I Flkr Flag 7day*	Uncommitted	3000 A	15 channels	p. 26
U 3V Unbal 7day	Uncommitted	3000 A	5 channels	p. 27

1Ø 1V 7day

Hook Up: Single Phase

Channel Functions

Input Channels

- 1 VIn 0 to 480 Vac
- 2 I1 0 to 3000 Aac (Rogowski)
- 3 V2 0 to 480 Vac
- 4 I2 0 to 3000 Aac (Rogowski)
- 5 Vne 0 to 480 Vac
- 6 I3 0 to 3000 Aac (Rogowski)

Detailed (Math) Channels

- 1 RMS of Signal VIn (Vac)
- 2-16 Unspecified

General Setup Values

Storage Mode: Adaptive Store
Recording Duration: 7 Days
FIFO / Recycle mode: Off

Input Calibration

Setup Values

- 1 VIn480 Volts = 480.0
- 2 I1 1000 Amps = 1000.0
- 3 V2 480 Volts = 480.0
- 4 I2 1000 Amps = 1000.0
- 5 Vne 480 Volts = 480.0
- 6 I3 1000 Amps = 1000.0

Alarms: None

1Ø Full PQ Flkr 7day

Hook Up: Single Phase

Channel Functions

Input Channels

- 1 VIn 0 to 480 Vac
- 2 I1 0 to 400 Aac (Rogowski)
- 3 V2 0 to 480 Vac
- 4 I2 0 to 400 Aac (Rogowski)
- 5 Vne 0 to 480 Vac
- 6 I3 0 to 400 Aac (Rogowski)

Detailed (Math) Channels

- 1 RMS of Signal VIn (Vac)
- 2 RMS of Signal Ia (Aac)
- 3 % THD Traditional of Signal Van (%)
- 4 Value all Harmonics of Signal Ia (Aac)
- 5 Flicker sensation on Van (Pfs)
- 6 Flicker flag on Van (Flg)
- 7 Flicker short term Van 10 mins (Pst)
- 8 Flicker long term Van 2 hours (Plt)
- 9 RMS of Signal Vne (Hi resolution) (Vac)
- 10-15 Unspecified
- 16 AC Frequency (Hz)

General Setup Values

Storage Mode: Adaptive Store
 Recording Duration: 7 Days
 FIFO / Recycle mode: Off

Input Calibration

Setup Values

- 1 VIn480 Volts = 480.0
- 2 I1 400 Amps = 400.0
- 3 V2 480 Volts = 480.0
- 4 I2 400 Amps = 400.0
- 5 Vne 480 Volts = 480.0
- 6 I3 400 Amps = 400.0

Alarms: On

Alarm Values High Low

		High	Low
1	Vac	253.0	216.2
3	%	8.0	Off
7	Pst	1.00	Off
8	Plt	0.80	Off
16	Hz	50.50	49.50

1Ø Full PQ Pwr 7day

Hook Up: Single Phase

Channel Functions

Input Channels

- 1 VIn 0 to 480 Vac
- 2 I1 0 to 3000 Aac (Rogowski)
- 3 V2 0 to 480 Vac
- 4 I2 0 to 3000 Aac (Rogowski)
- 5 Vne 0 to 480 Vac
- 6 I3 0 to 3000 Aac (Rogowski)

Detailed (Math) Channels

- 1 RMS of Signal VIn (Vac)
- 2 RMS of Signal I1 (Aac)
- 3 % THD Traditional of Signal VIn (%)
- 4 Value all Harmonics of Signal I1 (Aac)
- 5 Real Power (V.A)= $ChVIn * ChI1 / 1000$ (kW)
- 6 Reactive Power (V.A)= $VIn * I1 / 1000$ (kVr)
- 7 Displacement Power Factor (V,A)= VIn, I1 (PF)
- 8 Apparent Power (V.A)= $VIn * I1 / 1000$ (kVA)
- 9-16 Unspecified

General Setup Values

Storage Mode: Adaptive Store

Recording Duration: 7 Days

FIFO / Recycle mode: Off

Input Calibration

Setup Values

- 1 VIn480 Volts = 480.0
- 2 I1 1000 Amps = 1000.0
- 3 V2 480 Volts = 480.0
- 4 I2 1000 Amps = 1000.0
- 5 Vne 480 Volts = 480.0
- 6 I3 1000 Amps = 1000.0

Alarms: None

2 ϕ 2el Y Pwr 7day

Hook Up: 2-Phase 2-Element Wye

Channel Functions

Input Channels

- 1 Van 0 to 480 Vac
- 2 Ia 0 to 3000 Aac (Rogowski)
- 3 Vbn 0 to 480 Vac
- 4 Ib 0 to 3000 Aac (Rogowski)
- 5 V3 0 to 480 Vac
- 6 I3 0 to 3000 Aac (Rogowski)

Detailed (Math) Channels

- 1 RMS of Signal Van (Vac)
- 2 RMS of Signal Vbn (Vac)
- 3 Unspecified
- 4 RMS of Signal Ia (Aac)
- 5 RMS of Signal Ib (Aac)
- 6 Unspecified
- 7 2 Phase 3 Wire Real Power (Inputs 1,2,3,4) (kW)
- 8 2 Phase 3 Wire Reactive Power (Inputs 1,2,3,4) (kVr)
- 9 2 Phase 3 Wire Power Factor (Inputs 1,2,3,4) (PF)
- 10 2 Phase 3 Wire Apparent Power (Inputs 1,2,3,4) (kVA)
- 11-16 Unspecified

General Setup Values

Storage Mode: Adaptive Store
Recording Duration: 7 Days
FIFO / Recycle mode: Off

Input Calibration

Setup Values

- 1 Van 480 Volts = 480.0
- 2 Ia 1000 Amps = 1000.0
- 3 Vbn 480 Volts = 480.0
- 4 Ib 1000 Amps = 1000.0
- 5 Vne 480 Volts = 480.0
- 6 I3 1000 Amps = 1000.0

Alarms: None

3 ϕ 1el Y Pwr 7day

Hook Up: 3-Phase 1-Element Wye

Channel Functions

Input Channels

- 1 Vab 0 to 480 Vac
- 2 I1 0 to 3000 Aac (Rogowski)
- 3 V2 0 to 480 Vac
- 4 I2 0 to 3000 Aac (Rogowski)
- 5 V3 0 to 480 Vac
- 6 Ic 0 to 3000 Aac (Rogowski)

Detailed (Math) Channels

- 1 RMS of Signal Vab (Vac)
- 2-5 Unspecified
- 6 RMS of Signal Ic (Aac)
- 7 3 Phase 1 Element Real Power (Inputs 1,6) (kW)
- 8 3 Phase 1 Element Reactive Power (Inputs 1,6) (kVr)
- 9 3 Phase 1 Element Power Factor (Inputs 1,6) (PF)
- 10-16 Unspecified

General Setup Values

Storage Mode: Adaptive Store
Recording Duration: 7 Days
FIFO / Recycle mode: Off

Input Calibration

Setup Values

- 1 Vab 480 Volts = 480.0
- 2 I1 1000 Amps = 1000.0
- 3 V2 480 Volts = 480.0
- 4 I2 1000 Amps = 1000.0
- 5 V3 480 Volts = 480.0
- 6 Ic 1000 Amps = 1000.0

Alarms: None

3 ϕ 2.5el Y Pwr 7day

Hook Up: 3-Phase 2.5-Element Wye

Channel Functions

Input Channels

- 1 Van 0 to 480 Vac
- 2 Ia 0 to 3000 Aac (Rogowski)
- 3 Vbn 0 to 480 Vac
- 4 Ib 0 to 3000 Aac (Rogowski)
- 5 V3 0 to 480 Vac
- 6 Ic 0 to 3000 Aac (Rogowski)

Detailed (Math) Channels

- 1 RMS of Signal Van (Vac)
- 2 RMS of Signal Vbn (Vac)
- 3 Unspecified
- 4 RMS of Signal Ia (Aac)
- 5 RMS of Signal Ib (Aac)
- 6 RMS of Signal Ic (Aac)
- 7 3 Phase 2.5 Element Real Power (Inputs 1,2,3,4,6) (kW)
- 8 3 Phase 2.5 Element Reactive Power (Inputs 1,2,3,4,6) (kVr)
- 9 3 Phase 2.5 Element Power Factor (Inputs 1,2,3,4,6) (PF)
- 10-16 Unspecified

General Setup Values

Storage Mode: Adaptive Store
Recording Duration: 7 Days
FIFO / Recycle mode: Off

Input Calibration

Setup Values

- 1 Van 480 Volts = 480.0
- 2 Ia 1000 Amps = 1000.0
- 3 Vbn 480 Volts = 480.0
- 4 Ib 1000 Amps = 1000.0
- 5 V3 480 Volts = 480.0
- 6 Ic 1000 Amps = 1000.0

Alarms: None

3Ø 3el 11kV Flkr 7day

Hook Up: 3-Phase 3-Wire Delta 3el

Channel Functions

Input Channels

- 1 Vab 0 to 480 Vac
- 2 Ia 0 to 500 Aac (0-500 mV)
- 3 Vbc 0 to 480 Vac
- 4 Ib 0 to 500 Aac (0-500 mV)
- 5 Vca 0 to 480 Vac
- 6 Ic 0 to 500 Aac (0-500 mV)

Detailed (Math) Channels

- 1 RMS of Signal Vab (kV)
- 2 RMS of Signal Vbc (kV)
- 3 RMS of Signal Vca (kV)
- 4 RMS of Signal Ia (Aac)
- 5 RMS of Signal Ib (Aac)
- 6 RMS of Signal Ic (Aac)
- 7 Flicker sensation on Vab (Pfs)
- 8 Flicker sensation on Vbc (Pfs)
- 9 Flicker sensation on Vca (Pfs)
- 10 Flicker short term Vab 10 mins (Pst)
- 11 Flicker short term Vbc 10 mins (Pst)
- 12 Flicker short term Vca 10 mins (Pst)
- 13 Flicker long term Vab 2 hours (Plt)
- 14 Flicker long term Vbc 2 hours (Plt)
- 15 Flicker long term Vca 2 hours (Plt)
- 16 AC Frequency (Hz)

General Setup Values

Storage Mode: Adaptive Store
 Recording Duration: 7 Days
 FIFO / Recycle mode: Off

Input Calibration

Setup Values

- 1 Vab 480 Volts = 48.00
- 2 Ia 500 mV = 5.000
- 3 Vbc 480 Volts = 48.00
- 4 Ib 500 mV = 5.000
- 5 Vca 480 Volts = 48.00
- 6 Ic 500 mV = 5.000

Alarms: On

Alarm Values High Low

- | Channel | Unit | High | Low |
|---------|------|-------|-------|
| 1 | kV | 11.66 | 10.34 |
| 2 | kV | 11.66 | 10.34 |
| 3 | kV | 11.66 | 10.34 |
| 10 | Pst | 1.00 | Off |
| 11 | Pst | 1.00 | Off |
| 12 | Pst | 1.00 | Off |
| 13 | Plt | 0.80 | Off |
| 14 | Plt | 0.80 | Off |
| 15 | Plt | 0.80 | Off |
| 16 | Hz | 50.50 | 49.50 |

3Ø 3el 11kV THD Flkr 7day

Hook Up: 3-Phase 3-Wire Delta 3el

Channel Functions

Input Channels

- 1 Vab 0 to 480 Vac
- 2 Ia 0 to 500 Aac (0-500 mV)
- 3 Vbc 0 to 480 Vac
- 4 Ib 0 to 500 Aac (0-500 mV)
- 5 Vca 0 to 480 Vac
- 6 Ic 0 to 500 Aac (0-500 mV)

Detailed (Math) Channels

- 1 RMS of Signal Vab (kV)
- 2 RMS of Signal Vbc (kV)
- 3 RMS of Signal Vca (kV)
- 4 RMS of Signal Ia (Aac)
- 5 RMS of Signal Ib (Aac)
- 6 RMS of Signal Ic (Aac)
- 7 % THD Traditional of Signal Vab (%)
- 8 % THD Traditional of Signal Vbc (%)
- 9 % THD Traditional of Signal Vca (%)
- 10 Flicker short term Vab 10 mins (Pst)
- 11 Flicker short term Vbc 10 mins (Pst)
- 12 Flicker short term Vca 10 mins (Pst)
- 13 Flicker long term Vab 2 hours (Plt)
- 14 Flicker long term Vbc 2 hours (Plt)
- 15 Flicker long term Vca 2 hours (Plt)
- 16 AC Frequency (Hz)

General Setup Values

Storage Mode: Adaptive Store
 Recording Duration: 7 Days
 FIFO / Recycle mode: Off

Input Calibration

Setup Values

- 1 Vab 480 Volts = 48.00
- 2 Ia 500 mV = 5.000
- 3 Vbc 480 Volts = 48.00
- 4 Ib 500 mV = 5.000
- 5 Vca 480 Volts = 48.00
- 6 Ic 500 mV = 5.000

Alarms: On

Alarm Values High Low

- | Channel | Unit | High | Low |
|---------|------|-------|-------|
| 1 | kV | 11.66 | 10.34 |
| 2 | kV | 11.66 | 10.34 |
| 3 | kV | 11.66 | 10.34 |
| 7 | % | 8.0 | Off |
| 8 | % | 8.0 | Off |
| 9 | % | 8.0 | Off |
| 10 | Pst | 1.00 | Off |
| 11 | Pst | 1.00 | Off |
| 12 | Pst | 1.00 | Off |
| 13 | Plt | 0.80 | Off |
| 14 | Plt | 0.80 | Off |
| 15 | Plt | 0.80 | Off |
| 16 | Hz | 50.50 | 49.50 |

3Ø 3el 33kV Flkr 7day

Hook Up: 3-Phase 3-Wire Delta 3el

Channel Functions

Input Channels

- 1 Vab 0 to 480 Vac
- 2 Ia 0 to 500 Aac (0-500 mV)
- 3 Vbc 0 to 480 Vac
- 4 Ib 0 to 500 Aac (0-500 mV)
- 5 Vca 0 to 480 Vac
- 6 Ic 0 to 500 Aac (0-500 mV)

Detailed (Math) Channels

- 1 RMS of Signal Vab (kV)
- 2 RMS of Signal Vbc (kV)
- 3 RMS of Signal Vca (kV)
- 4 RMS of Signal Ia (Aac)
- 5 RMS of Signal Ib (Aac)
- 6 RMS of Signal Ic (Aac)
- 7 Flicker sensation on Vab (Pfs)
- 8 Flicker sensation on Vbc (Pfs)
- 9 Flicker sensation on Vca (Pfs)
- 10 Flicker short term Vab 10 mins (Pst)
- 11 Flicker short term Vbc 10 mins (Pst)
- 12 Flicker short term Vca 10 mins (Pst)
- 13 Flicker long term Vab 2 hours (Plt)
- 14 Flicker long term Vbc 2 hours (Plt)
- 15 Flicker long term Vca 2 hours (Plt)
- 16 AC Frequency (Hz)

General Setup Values

Storage Mode: Adaptive Store
 Recording Duration: 7 Days
 FIFO / Recycle mode: Off

Input Calibration

Setup Values

- 1 Vab 480 Volts = 144.0
- 2 Ia 500 mV = 5.000
- 3 Vbc 480 Volts = 144.0
- 4 Ib 500 mV = 5.000
- 5 Vca 480 Volts = 144.0
- 6 Ic 500 mV = 5.000

Alarms: On

Alarm Values High Low

- | | | High | Low |
|----|-----|-------|-------|
| 1 | kV | 35.0 | 31.0 |
| 2 | kV | 35.0 | 31.0 |
| 3 | kV | 35.0 | 31.0 |
| 10 | Pst | 1.00 | Off |
| 11 | Pst | 1.00 | Off |
| 12 | Pst | 1.00 | Off |
| 13 | Plt | 0.80 | Off |
| 14 | Plt | 0.80 | Off |
| 15 | Plt | 0.80 | Off |
| 16 | Hz | 50.50 | 49.50 |

3Ø 3el 33kV THD Flkr 7day

Hook Up: 3-Phase 3-Wire Delta 3el

Channel Functions

Input Channels

- 1 Vab 0 to 480 Vac
- 2 Ia 0 to 500 Aac (0-500 mV)
- 3 Vbc 0 to 480 Vac
- 4 Ib 0 to 500 Aac (0-500 mV)
- 5 Vca 0 to 480 Vac
- 6 Ic 0 to 500 Aac (0-500 mV)

Detailed (Math) Channels

- 1 RMS of Signal Vab (kV)
- 2 RMS of Signal Vbc (kV)
- 3 RMS of Signal Vca (kV)
- 4 RMS of Signal Ia (Aac)
- 5 RMS of Signal Ib (Aac)
- 6 RMS of Signal Ic (Aac)
- 7 % THD Traditional of Signal Vab (%)
- 8 % THD Traditional of Signal Vbc (%)
- 9 % THD Traditional of Signal Vca (%)
- 10 Flicker short term Vab 10 mins (Pst)
- 11 Flicker short term Vbc 10 mins (Pst)
- 12 Flicker short term Vca 10 mins (Pst)
- 13 Flicker long term Vab 2 hours (Plt)
- 14 Flicker long term Vbc 2 hours (Plt)
- 15 Flicker long term Vca 2 hours (Plt)
- 16 AC Frequency (Hz)

General Setup Values

Storage Mode: Adaptive Store
 Recording Duration: 7 Days
 FIFO / Recycle mode: Off

Input Calibration Setup Values

- 1 Vab 480 Volts = 144.0
- 2 Ia 500 mV = 5.000
- 3 Vbc 480 Volts = 144.0
- 4 Ib 500 mV = 5.000
- 5 Vca 480 Volts = 144.0
- 6 Ic 500 mV = 5.000

Alarms: On

Alarm Values	High	Low
1 kV	35.0	31.0
2 kV	35.0	31.0
3 kV	35.0	31.0
10 Pst	1.00	0.00
11 Pst	1.00	0.00
12 Pst	1.00	0.00
13 Plt	0.80	0.00
14 Plt	0.80	0.00
15 Plt	0.80	0.00
16 Hz	50.50	49.50

3 ϕ 3w D Pwr 7day

Hook Up: 3-Phase 3-Wire Delta

Channel Functions

Input Channels

- 1 Vab 0 to 480 Vac
- 2 Ia 0 to 3000 Aac (Rogowski)
- 3 V2 0 to 480 Vac
- 4 I2 0 to 3000 Aac (Rogowski)
- 5 Vcb 0 to 480 Vac
- 6 Ic 0 to 3000 Aac (Rogowski)

Detailed (Math) Channels

- 1 RMS of Signal Vab (Vac)
- 2 Unspecified
- 3 RMS of Signal Vcb (Vac)
- 4 RMS of Signal Ia (Aac)
- 5 Unspecified
- 6 RMS of Signal Ic (Aac)
- 7 3 Phase 3 wire YD Real Power (Inputs 1,2,3or5,6) (kW)
- 8 3 Phase 3 wire YD Reactive Power (Inputs 1,2,3or5,6) (kVr)
- 9 3 Phase 3 wire YD Power Factor (Inputs 1,2,3or5,6) (PF)
- 10 3 Phase 3 wire YD Apparent Power (Inputs 1,2,3or5,6) (KVA)
- 11-16 Unspecified

General Setup Values

Storage Mode: Adaptive Store
Recording Duration: 7 Days
FIFO / Recycle mode: Off

Input Calibration

Setup Values

- 1 Vab 480 Volts = 480.0
- 2 Ia 1000 Amps = 1000.
- 3 V2 480 Volts = 480.0
- 4 I2 1000 Amps = 1000.
- 5 Vcb 480 Volts = 480.0
- 6 Ic 1000 Amps = 1000.

Alarms: None

3 ϕ 4w Y 3V 3I 7day

Hook Up: 3-Phase 4-Wire Wye

Channel Functions

Input Channels

- 1 Van 0 to 480 Vac
- 2 Ia 0 to 3000 Aac (Rogowski)
- 3 Vbn 0 to 480 Vac
- 4 Ib 0 to 3000 Aac (Rogowski)
- 5 Vcn 0 to 480 Vac
- 6 Ic 0 to 3000 Aac (Rogowski)

Detailed (Math) Channels

- 1 RMS of Signal Van (Vac)
- 2 RMS of Signal Vbn (Vac)
- 3 RMS of Signal Vcn (Vac)
- 4 RMS of Signal Ia (Aac)
- 5 RMS of Signal Ib (Aac)
- 6 RMS of Signal Ic (Aac)
- 7-16 Unspecified

General Setup Values

Storage Mode: Adaptive Store
Recording Duration: 7 Days
FIFO / Recycle mode: Off

Input Calibration

Setup Values

- 1 Van 480 Volts = 480.0
- 2 Ia 1000 Amps = 1000.0
- 3 Vbn 480 Volts = 480.0
- 4 Ib 1000 Amps = 1000.0
- 5 Vcn 480 Volts = 480.0
- 6 Ic 1000 Amps = 1000.0

Alarms: On

Alarm Values High Low

- | | | | |
|---|-----|-------|-------|
| 1 | Vac | 253.0 | 216.2 |
| 2 | Vac | 253.0 | 216.2 |
| 3 | Vac | 253.0 | 216.2 |

3Ø 4w Y 3V 3I 14day

Hook Up: 3-Phase 4-Wire Wye

Channel Functions

Input Channels

- 1 Van 0 to 480 Vac
- 2 Ia 0 to 3000 Aac (Rogowski)
- 3 Vbn 0 to 480 Vac
- 4 Ib 0 to 3000 Aac (Rogowski)
- 5 Vcn 0 to 480 Vac
- 6 Ic 0 to 3000 Aac (Rogowski)

Detailed (Math) Channels

- 1 RMS of Signal Van (Vac)
- 2 RMS of Signal Vbn (Vac)
- 3 RMS of Signal Vcn (Vac)
- 4 RMS of Signal Ia (Aac)
- 5 RMS of Signal Ib (Aac)
- 6 RMS of Signal Ic (Aac)
- 7-16 Unspecified

General Setup Values

Storage Mode: Adaptive Store
Recording Duration: 14 Days
FIFO / Recycle mode: Off

Input Calibration

Setup Values

- 1 Van 480 Volts = 480.0
- 2 Ia 1000 Amps = 1000.0
- 3 Vbn 480 Volts = 480.0
- 4 Ib 1000 Amps = 1000.0
- 5 Vcn 480 Volts = 480.0
- 6 Ic 1000 Amps = 1000.0

Alarms: On

Alarm Values High Low

- | | | | |
|---|-----|-------|-------|
| 1 | Vac | 253.0 | 216.2 |
| 2 | Vac | 253.0 | 216.2 |
| 3 | Vac | 253.0 | 216.2 |

3Ø 4w Y 3V only 7day

Hook Up: 3-Phase 4-Wire Wye

Channel Functions

Input Channels

- 1 Van 0 to 480 Vac
- 2 Ia 0 to 3000 Aac (Rogowski)
- 3 Vbn 0 to 480 Vac
- 4 Ib 0 to 3000 Aac (Rogowski)
- 5 Vcn 0 to 480 Vac
- 6 Ic 0 to 3000 Aac (Rogowski)

Detailed (Math) Channels

- 1 RMS of Signal Van (Vac)
- 2 RMS of Signal Vbn (Vac)
- 3 RMS of Signal Vcn (Vac)
- 4-16 Unspecified

General Setup Values

Storage Mode: Adaptive Store
Recording Duration: 7 Days
FIFO / Recycle mode: Off

Input Calibration

Setup Values

- 1 Van 480 Volts = 480.0
- 2 Ia 1000 Amps = 1000.0
- 3 Vbn 480 Volts = 480.0
- 4 Ib 1000 Amps = 1000.0
- 5 Vcn 480 Volts = 480.0
- 6 Ic 1000 Amps = 1000.0

Alarms: On

Alarm Values High Low

- | | | | |
|---|-----|-------|-------|
| 1 | Vac | 253.0 | 216.2 |
| 2 | Vac | 253.0 | 216.2 |
| 3 | Vac | 253.0 | 216.2 |

3ø 4w Y Flkr 7day

Hook Up: 3-Phase 4-Wire Wye

Channel Functions

Input Channels

- 1 Van 0 to 480 Vac
- 2 Ia 0 to 3000 Aac (Rogowski)
- 3 Vbn 0 to 480 Vac
- 4 Ib 0 to 3000 Aac (Rogowski)
- 5 Vcn 0 to 480 Vac
- 6 Ic 0 to 3000 Aac (Rogowski)

Detailed (Math) Channels

- 1 RMS of Signal Van (Vac)
- 2 RMS of Signal Vbn (Vac)
- 3 RMS of Signal Vcn (Vac)
- 4 RMS of Signal Ia (Aac)
- 5 RMS of Signal Ib (Aac)
- 6 RMS of Signal Ic (Aac)
- 7 Flicker sensation on Van (Pfs)
- 8 Flicker sensation on Vbn (Pfs)
- 9 Flicker sensation on Vcn (Pfs)
- 10 Flicker short term Van 10 mins (Pst)
- 11 Flicker short term Vbn 10 mins (Pst)
- 12 Flicker short term Vcn 10 mins (Pst)
- 13 Flicker long term Van 2 hours (Plt)
- 14 Flicker long term Vbn 2 hours (Plt)
- 15 Flicker long term Vcn 2 hours (Plt)
- 16 AC Frequency (Hz)

General Setup Values

Storage Mode: Adaptive Store
 Recording Duration: 7 Days
 FIFO / Recycle mode: Off

Input Calibration

Setup Values

- 1 Van 480 Volts = 480.0
- 2 Ia 1000 Amps = 1000.0
- 3 Vbn 480 Volts = 480.0
- 4 Ib 1000 Amps = 1000.0
- 5 Vcn 480 Volts = 480.0
- 6 Ic 1000 Amps = 1000.0

Alarms: On

Alarm Values High Low

- | | | High | Low |
|----|-----|-------|-------|
| 1 | Vac | 253.0 | 216.2 |
| 2 | Vac | 253.0 | 216.2 |
| 3 | Vac | 253.0 | 216.2 |
| 10 | Pst | 1.00 | Off |
| 11 | Pst | 1.00 | Off |
| 12 | Pst | 1.00 | Off |
| 13 | Plt | 0.80 | Off |
| 14 | Plt | 0.80 | Off |
| 15 | Plt | 0.80 | Off |

3Ø 4w Y Flkr THD 7day

Hook Up: 3-Phase 4-Wire Wye

Channel Functions

Input Channels

- 1 Van 0 to 480 Vac
- 2 Ia 0 to 3000 Aac (Rogowski)
- 3 Vbn 0 to 480 Vac
- 4 Ib 0 to 3000 Aac (Rogowski)
- 5 Vcn 0 to 480 Vac
- 6 Ic 0 to 3000 Aac (Rogowski)

Detailed (Math) Channels

- 1 RMS of Signal Van (Vac)
- 2 RMS of Signal Vbn (Vac)
- 3 RMS of Signal Vcn (Vac)
- 4 RMS of Signal Ia (Aac)
- 5 RMS of Signal Ib (Aac)
- 6 RMS of Signal Ic (Aac)
- 7 % THD Traditional of Signal Van (%)
- 8 % THD Traditional of Signal Vbn (%)
- 9 % THD Traditional of Signal Vcn (%)
- 10 Flicker short term Van 10 mins (Pst)
- 11 Flicker short term Vbn 10 mins (Pst)
- 12 Flicker short term Vcn 10 mins (Pst)
- 13 Flicker long term Van 2 hours (Plt)
- 14 Flicker long term Vbn 2 hours (Plt)
- 15 Flicker long term Vcn 2 hours (Plt)
- 16 AC Frequency (Hz)

General Setup Values

Storage Mode: Adaptive Store
 Recording Duration: 7 Days
 FIFO / Recycle mode: Off

Input Calibration

Setup Values

- 1 Van 480 Volts = 480.0
- 2 Ia 1000 Amps = 1000.0
- 3 Vbn 480 Volts = 480.0
- 4 Ib 1000 Amps = 1000.0
- 5 Vcn 480 Volts = 480.0
- 6 Ic 1000 Amps = 1000.0

Alarms: On

Alarm Values High Low

- | | | High | Low |
|----|-----|-------|-------|
| 1 | Vac | 253.0 | 216.2 |
| 2 | Vac | 253.0 | 216.2 |
| 3 | Vac | 253.0 | 216.2 |
| 7 | % | 8.0 | Off |
| 8 | % | 8.0 | Off |
| 9 | % | 8.0 | Off |
| 10 | Pst | 1.00 | Off |
| 11 | Pst | 1.00 | Off |
| 12 | Pst | 1.00 | Off |
| 13 | Plt | 0.80 | Off |
| 14 | Plt | 0.80 | Off |
| 15 | Plt | 0.80 | Off |
| 16 | Hz | 50.50 | 49.50 |

3Ø 4w Y Hmnc 7day (PM3000 Default)

Hook Up: 3-Phase 4-Wire Wye

Channel Functions

Input Channels

- 1 Van 0 to 480 Vac
- 2 Ia 0 to 3000 Aac (Rogowski)
- 3 Vbn 0 to 480 Vac
- 4 Ib 0 to 3000 Aac (Rogowski)
- 5 Vcn 0 to 480 Vac
- 6 Ic 0 to 3000 Aac (Rogowski)

Detailed (Math) Channels

- 1 RMS of Signal Van (Vac)
- 2 RMS of Signal Vbn (Vac)
- 3 RMS of Signal Vcn (Vac)
- 4 RMS of Signal Ia (Aac)
- 5 RMS of Signal Ib (Aac)
- 6 RMS of Signal Ic (Aac)
- 7 % THD Traditional of Signal Van (%)
- 8 % THD Traditional of Signal Vbn (%)
- 9 % THD Traditional of Signal Vcn (%)
- 10 Value all Harmonics of Signal Ia (Aac)
- 11 Value all Harmonics of Signal Ib (Aac)
- 12 Value all Harmonics of Signal Ic (Aac)
- 13-16 Unspecified

General Setup Values

Storage Mode: Adaptive Store
 Recording Duration: 7 Days
 FIFO / Recycle mode: Off

Input Calibration

Setup Values

- 1 Van 480 Volts = 480.0
- 2 Ia 1000 Amps = 1000.0
- 3 Vbn 480 Volts = 480.0
- 4 Ib 1000 Amps = 1000.0
- 5 Vcn 480 Volts = 480.0
- 6 Ic 1000 Amps = 1000.0

Alarms: On

Alarm Values High Low

- | | | High | Low |
|---|-----|-------|-------|
| 1 | Vac | 253.0 | 216.2 |
| 2 | Vac | 253.0 | 216.2 |
| 3 | Vac | 253.0 | 216.2 |
| 7 | % | 8.0 | Off |
| 8 | % | 8.0 | Off |
| 9 | % | 8.0 | Off |

3Ø 4w Y Pwr 7day

Hook Up: 3-Phase 4-Wire Wye

Channel Functions

Input Channels

- 1 Van 0 to 480 Vac
- 2 Ia 0 to 3000 Aac (Rogowski)
- 3 Vbn 0 to 480 Vac
- 4 Ib 0 to 3000 Aac (Rogowski)
- 5 Vcn 0 to 480 Vac
- 6 Ic 0 to 3000 Aac (Rogowski)

Detailed (Math) Channels

- 1 RMS of Signal Van (Vac)
- 2 RMS of Signal Vbn (Vac)
- 3 RMS of Signal Vcn (Vac)
- 4 RMS of Signal Ia (Aac)
- 5 RMS of Signal Ib (Aac)
- 6 RMS of Signal Ic (Aac)
- 7 Displacement Power Factor (V,A)= Van, Ia (PF)
- 8 Displacement Power Factor (V,A)= Vbn, Ib (PF)
- 9 Displacement Power Factor (V,A)= Vcn, Ic (PF)
- 10 Real Power Factor (V,A)= Van, Ia (PF)
- 11 Real Power Factor (V,A)= Vbn, Ib (PF)
- 12 Real Power Factor (V,A)= Vcn, Ic (PF)
- 13 3 Phase 4 wire Real Power (Inputs 1,2,3,4,5,6) (kW)
- 14 3 Phase 4 wire Reactive Power (Inputs 1,2,3,4,5,6) (kVr)
- 15 3 Phase 4 wire Apparent Power (Inputs 1,2,3,4,5,6) (kVA)
- 16 3 Phase 4 wire Power Factor (Inputs 1,2,3,4,5,6) (PF)

General Setup Values

Storage Mode: Adaptive Store
 Recording Duration: 7 Days
 FIFO / Recycle mode: Off

Input Calibration

Setup Values

- 1 Van 480 Volts = 480.0
- 2 Ia 1000 Amps = 1000.0
- 3 Vbn 480 Volts = 480.0
- 4 Ib 1000 Amps = 1000.0
- 5 Vcn 480 Volts = 480.0
- 6 Ic 1000 Amps = 1000.0

Alarms: On

Alarm Values High Low

- | | High | Low |
|-------|-------|-------|
| 1 Vac | 253.0 | 216.2 |
| 2 Vac | 253.0 | 216.2 |
| 3 Vac | 253.0 | 216.2 |

3 ϕ 4w Y Pwr Flkr 7day

Hook Up: 3-Phase 4-Wire Wye

Channel Functions

Input Channels

- 1 Van 0 to 480 Vac
- 2 Ia 0 to 3000 Aac (Rogowski)
- 3 Vbn 0 to 480 Vac
- 4 Ib 0 to 3000 Aac (Rogowski)
- 5 Vcn 0 to 480 Vac
- 6 Ic 0 to 3000 Aac (Rogowski)

Detailed (Math) Channels

- 1 RMS of Signal Van (Vac)
- 2 RMS of Signal Vbn (Vac)
- 3 RMS of Signal Vcn (Vac)
- 4 RMS of Signal Ia (Aac)
- 5 RMS of Signal Ib (Aac)
- 6 RMS of Signal Ic (Aac)
- 7 3 Phase 4 wire Real Power (Inputs 1,2,3,4,5,6) (kW)
- 8 3 Phase 4 wire Reactive Power (Inputs 1,2,3,4,5,6) (kVr)
- 9 3 Phase 4 wire Apparent Power (Inputs 1,2,3,4,5,6) (kVA)
- 10 3 Phase 4 wire Power Factor (Inputs 1,2,3,4,5,6) (PF)
- 11 Flicker short term Van 10 mins (Pst)
- 12 Flicker short term Vbn 10 mins (Pst)
- 13 Flicker short term Vcn 10 mins (Pst)
- 14 Flicker long term Van 2 hours (Plt)
- 15 Flicker long term Vbn 2 hours (Plt)
- 16 Flicker long term Vcn 2 hours (Plt)

General Setup Values

Storage Mode: Adaptive Store
Recording Duration: 7 Days
FIFO / Recycle mode: Off

Input Calibration

Setup Values

- 1 Van 480 Volts = 480.0
- 2 Ia 1000 Amps = 1000.0
- 3 Vbn 480 Volts = 480.0
- 4 Ib 1000 Amps = 1000.0
- 5 Vcn 480 Volts = 480.0
- 6 Ic 1000 Amps = 1000.0

Alarms: None

3Ø 4w Y Unbal 7day

Hook Up: 3-Phase 4-Wire Wye

Channel Functions

Input Channels

- 1 Van 0 to 480 Vac
- 2 Ia 0 to 3000 Aac (Rogowski)
- 3 Vbn 0 to 480 Vac
- 4 Ib 0 to 3000 Aac (Rogowski)
- 5 Vcn 0 to 480 Vac
- 6 Ic 0 to 3000 Aac (Rogowski)

Detailed (Math) Channels

- 1 RMS of Signal Van (Vac)
- 2 RMS of Signal Vbn (Vac)
- 3 RMS of Signal Vcn (Vac)
- 4 RMS of Signal Ia (Aac)
- 5 RMS of Signal Ib (Aac)
- 6 RMS of Signal Ic (Aac)
- 7 Real Power Factor (V,A)= Van, Ia (PF)
- 8 Real Power Factor (V,A)= Vbn, Ib (PF)
- 9 Real Power Factor (V,A)= Vcn, Ic (PF)
- 10 3 Phase 4 wire Real Power (Inputs 1,2,3,4,5,6) (kW)
- 11 3 Phase 4 wire Reactive Power (Inputs 1,2,3,4,5,6) (kVr)
- 12 3 Phase 4 wire Apparent Power (Inputs 1,2,3,4,5,6) (kVA)
- 13 3 Phase 4 wire Power Factor (Inputs 1,2,3,4,5,6) (PF)
- 14 3 Phase %UnBalance on 3 Currents (Inputs 4,5,6) (%)
- 15 3 Phase Volts NPS-PPS ratio (Inputs 1,2,3) (%)
- 16 3 Phase Volts NPS-Volts Phase Angle [Inputs 1,2,3] (°)

General Setup Values

Storage Mode: Adaptive Store
 Recording Duration: 7 Days
 FIFO / Recycle mode: Off

Input Calibration

Setup Values

- 1 Van 480 Volts = 480.0
- 2 Ia 1000 Amps = 1000.0
- 3 Vbn 480 Volts = 480.0
- 4 Ib 1000 Amps = 1000.0
- 5 Vcn 480 Volts = 480.0
- 6 Ic 1000 Amps = 1000.0

Alarms: On

Alarm Values High Low

- | Channel | Unit | High | Low |
|---------|------|-------|-------|
| 1 | Vac | 253.0 | 216.2 |
| 2 | Vac | 253.0 | 216.2 |
| 3 | Vac | 253.0 | 216.2 |
| 15 | % | 2.0 | Off |

U 3V 3I 7day

Hook Up: Uncommitted

Channel Functions

Input Channels

- 1 V1 0 to 480 Vac
- 2 I1 0 to 3000 Aac (Rogowski)
- 3 V2 0 to 480 Vac
- 4 I2 0 to 3000 Aac (Rogowski)
- 5 V3 0 to 480 Vac
- 6 I3 0 to 3000 Aac (Rogowski)

Detailed (Math) Channels

- 1 RMS of Signal V1 (Vac)
- 2 RMS of Signal V2 (Vac)
- 3 RMS of Signal V3 (Vac)
- 4 RMS of Signal I1 (Aac)
- 5 RMS of Signal I2 (Aac)
- 6 RMS of Signal I3 (Aac)
- 7-16 Unspecified

General Setup Values

Storage Mode: Adaptive Store
Recording Duration: 7 Days
FIFO / Recycle mode: Off

Input Calibration

Setup Values

- 1 V1 480 Volts = 480.0
- 2 I1 1000 Amps = 1000.0
- 3 V2 480 Volts = 480.0
- 4 I2 1000 Amps = 1000.0
- 5 V3 480 Volts = 480.0
- 6 I3 1000 Amps = 1000.0

Alarms: None

U 3V 3I Flkr Flag 7day

Hook Up: Uncommitted

Channel Functions

Input Channels

- 1 V1 0 to 480 Vac
- 2 I1 0 to 3000 Aac (Rogowski)
- 3 V2 0 to 480 Vac
- 4 I2 0 to 3000 Aac (Rogowski)
- 5 V3 0 to 480 Vac
- 6 I3 0 to 3000 Aac (Rogowski)

Detailed (Math) Channels

- 1 RMS of Signal V1 (Vac)
- 2 RMS of Signal V2 (Vac)
- 3 RMS of Signal V3 (Vac)
- 4 RMS of Signal I1 (Aac)
- 5 RMS of Signal I2 (Aac)
- 6 RMS of Signal I3 (Aac)
- 7 Flicker sensation on V1 (Pfs)
- 8 Flicker sensation on V2 (Pfs)
- 9 Flicker sensation on V3 (Pfs)
- 10 Flicker short term V1 10 mins (Pst)
- 11 Flicker short term V2 10 mins (Pst)
- 12 Flicker short term V3 10 mins (Pst)
- 13 Flicker flag on V1 (Flg)
- 14 Flicker flag on V2 (Flg)
- 15 Flicker flag on V3 (Flg)
- 16 Unspecified

General Setup Values

Storage Mode: Adaptive Store
Recording Duration: 7 Days
FIFO / Recycle mode: Off

Input Calibration

Setup Values

- 1 V1 480 Volts = 480.0
- 2 I1 1000 Amps = 1000.0
- 3 V2 480 Volts = 480.0
- 4 I2 1000 Amps = 1000.0
- 5 V3 480 Volts = 480.0
- 6 I3 1000 Amps = 1000.0

Alarms: None

U 3V Unbal 7day

Hook Up: Uncommitted

Channel Functions

Input Channels

- 1 V1 0 to 480 Vac
- 2 I1 0 to 3000 Aac (Rogowski)
- 3 V2 0 to 480 Vac
- 4 I2 0 to 3000 Aac (Rogowski)
- 5 V3 0 to 480 Vac
- 6 I3 0 to 3000 Aac (Rogowski)

Detailed (Math) Channels

- 1 RMS of Signal V1 (Vac)
- 2 RMS of Signal V2 (Vac)
- 3 RMS of Signal V3 (Vac)
- 4-6 Unspecified
- 7 3 Phase Volts NPS-PPS ratio (Inputs 1,2,3) (%)
- 8 3 Phase Volts NPS-Volts Phase Angle [Inputs 1,2,3] (°)
- 9-16 Unspecified

General Setup Values

Storage Mode: Adaptive Store
Recording Duration: 7 Days
FIFO / Recycle mode: Off

Input Calibration

Setup Values

- 1 V1 480 Volts = 480.0
- 2 I1 1000 Amps = 1000.0
- 3 V2 480 Volts = 480.0
- 4 I2 1000 Amps = 1000.0
- 5 V3 480 Volts = 480.0
- 6 I3 1000 Amps = 1000.0

Alarms: None