

# PA3000 Smart Power Meter

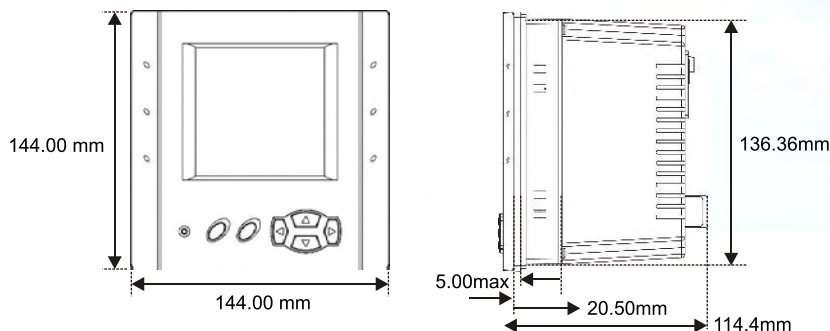
Ethernet-enabled revenue class multifunction meter for power measurement, power quality analysis, and power usage reporting



## Features

- Class 0.5 bi-directional true RMS energy and full power parameters measurement
- Block or Rolling power demand measurement
- THD, individual harmonics, and sag/swell power quality records
- Data logging for alarm, sag, swell events with time-stamped
- Report generation for daily and regular power usage including kWh, Demand, peak THD, peak voltage, max/min kW...etc
- Communication interfaces : Ethernet, RS485
- Communication protocol: Modbus over TCP/IP for Ethernet, Modbus or DNP 3.0 for RS485
- Up to 4 channels of re-transmission analog outputs for field integration
- 12 digital inputs for power system status monitoring
- 2 digital relays for kWh pulse or alarm outputs
- Automatic detection of voltage & current wiring
- Multi-language support

## Mounting



■ Panel cut-out area is 138x138mm

## Certificate

1. LVD Test : EN61010-1
2. CE Test :
  - EN61326 Conducted Emission
  - EN61000-3-2 Harmonic Current Emission
  - EN61000-4-2 Electrostatic Discharge
  - EN61000-4-4 Electrical Fast Transient/Burst
  - EN61000-4-6 Conducted Susceptibility
  - EN61000-4-11 Voltage Dips and Interruption
  - EN61326 Radiated Emission
  - EN61000-3-3 Voltage Fluctuation and Flicker
  - EN61000-4-3 Radiated Susceptibility
  - EN61000-4-5 Surge
  - EN61000-4-8 Power Frequency magnetic Field
3. FCC Test : Class A and CISPR 22
4. Rain and Dust Test : Panel IP54



**Arch Meter Corporation**  
www.archmeter.com

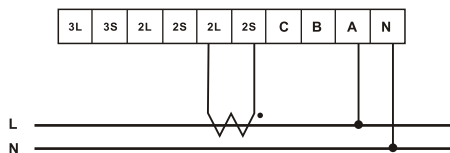
# Specification

<b>Power parameters measure</b>	Current : 3 phase, neutral, accuracy 0.1% Voltage : 3 phase phase-phase, phase-neutral, accuracy 0.1% Frequency : 47/63 Hz Total power : Active, reactive, apparent power, accuracy 0.5% Power per phase : Active, reactive, apparent power, accuracy 0.5% Power factor(True and Fundamental ) : Total, per phase.
<b>Energy measure</b>	Energy : Active, reactive, apparent energy, accuracy 0.5% Bi-directional energy : Deliver and receive kWh, kVARh, kVAh
<b>Demand measure*</b>	Bi-directional Block/Rolling demand
<b>Power Quality measure*</b>	Harmonic : V, I THD and individual harmonics Sag/Swell : Configurable setting points
<b>Report and event logging*</b>	Report : Daily report : this day, yesterday Regular report : this period, last reset Event logging : Sag, swell, alarm logging
<b>Display and input/output</b>	Panel display : Mono 128 x 128 STN-LCD Digital input : 12 channel dry contact inputs Digital output : 2 channel relay for alarm or kWh pulse output Analog input : 4 channel 4-20mA input Analog output : 4 channel 4~20 mA for V, I, kW, kVA, kVAR Voltage connection : not exceed 600 V Current connection : 0~5A Power supply : 86~242 VAC or 100~300VDC
<b>Communication</b>	Primary port : RS485 Modbus or DNP 3.0 protocol Secondary port* : Ethernet : 10/100 Mbps, Modbus over TCP/IP protocol
<b>Environmental &amp; Physical</b>	Operation temperature : -10°C to 60°C Storage temperature : -25°C to 80°C Humidity : 20 to 90%RH (non-condensing) Dimensions : 144mm(L) x 144mm(W) x 94mm(H)

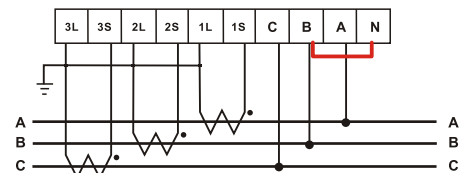
\* : only in Advance model

# Wiring diagram

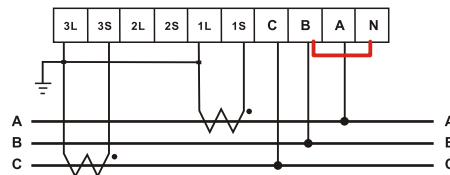
■ 1P2W/1CT



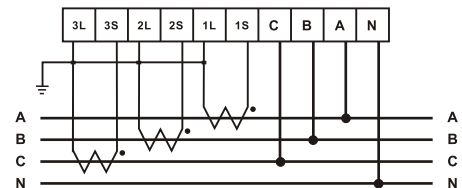
■ 3P3W/3CT



■ 3P3W/2CT



■ 3P4W/3CT



# Ordering Code

PA3000 - □ □ □ □

**Model**

- 0 : Standard
- 1 : Advance

**Secondary Port**

- 0 : No secondary port
- 1 : Ethernet

**AO function**

- 0 : Without AO function
- 1 : With AO function

**AI function**

- 0 : Without AI function
- 1 : With AI function



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