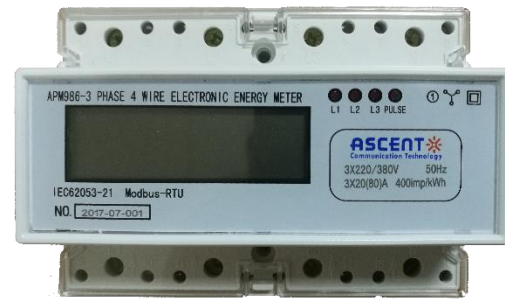


APM986 Three-Phase DIN Rail Energy Meter

APM980 Series



- **Highly reliable, compact design**
- **Standard DIN rail installation**
- **Conforms to IEC 62053-21 energy meter standards**
- **Easy to read, 7-digit LCD display**
- **RS485 communication interface**

APM986 DIN Rail Three-Phase Electronic kWh energy meter is a robust and cost-effective three-phase electricity meter which adopts micro-electronic technology with a special integrated circuit. It has anti-EMI and low-power features and is widely used in office buildings, shopping malls, residences, airports, metro stations, and more.

APM986 energy meter features digital sampling processing technology. Its technical performance fully meets the international standards of IEC 62053-21 in grade 1 of single-phase active watt-hour meters. The device is capable of accurately measuring 50 Hz or 60 Hz active energy consumption from three-phase AC power grid loads.

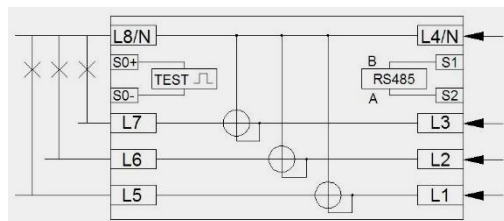
With its compact design and standard 35 mm DIN rail mounted housing, AP986 can be installed quickly and conveniently. The large display shows active power consumption, which can be remotely monitored through an RS485 interface.

Key Features

- 35 mm DIN standard guideway installation which conforms to the DIN EN 50022 standard, or pre-plate installation
- 7-pole width (modulus 17.5mm), conforming to DIN 43880 standard
- 7-digit LCD display, with a standard configuration of 6 + 1 (999999.1 kWh) display units, can also be configured for 5 + 2 displays
- The standard configuration of passive electric pulse output (with polarity) can be used to select the passive remote power pulse output (non-polarity), which can be used to join various AMR systems, and conforms to the standard of IEC 62053-31 and DIN 43864
- 6 LED indicators for phase power (yellow, green, red), electrical pulse signal (white), and COM (yellow) for RS485 communication instructions
- The standard configuration includes check current load current trends and automatically detect load current trend direction, which is indicated by a single LED
- Single-direction measurements of three-phase four-wire active power consumption is independent of the current direction of load current, which conforms to the IEC 62053-21 standard
- Standard S-type connections (bottom line, top line), direct access, optional CT access and PT & CT access
- The standard configuration of short terminal blocks can be used to select extension terminals and ensure safe operations
- The standard configuration communication protocol meets the DL/t645-1997 standard
- 110 V_{AC} to 280 V_{AC} with ≤ 1 V resolution and ≤ 2 % accuracy error
- 45 Hz to 55 Hz frequency with ≤ 0.1 Hz resolution and ≤ 2 % accuracy error
- 0 A to 20 A current (for all 3 phases) with ≤ 0.1 A resolution and ≤ 2 % accuracy error
- Measuring range is 0 kw to 4 kw (for all 3 phases) with ≤ 1 W resolution and ≤ 2 % accuracy error
- Operating temperature 0 °C to +50 °C
- Operating humidity 10 % to 95 % RH (non-condensing)

Diagram

External and Mounting Dimensions

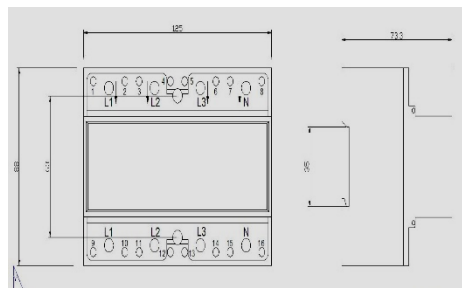


Specifications

Name	Model Number	Precision	Reference Voltage	Current Specifications
Three-phase DIN rail electronic power meter	APM986	1.0 level	220/380 V	1.5(6) A 5A(CT)
		2.0 level	230/400 V	5(30) A 10(60) A
			240/415 V	20(80) A 30(90) A

Wiring Diagram

Wiring Diagram



Port Description:

The table is directly connected

L1. L2. L3 enters the terminal when entering line. L4 / N and L8 / N are the outgoing end load (L1 - L6 is phase line. L4 / n-l8 / N is zero).

Passive pulse output port: SO - (-) SO + (+) can be used as the calibration pulse and power pulse measurement interface

RS485 communication port: S2 (A) S1 (B)

LCD screen display:

1. The above shows x-x-x as the software version number
2. The display self-check shows 88888.8.8
3. Display table constant C XXXX
4. Display table address high position H XXXXXX

1. Display table address low XXXXXX (system defaults to table number)

2. Power display: XXXXX. XX

Indicator light

The communication is directed yellow for RS485

L1 L2 L3 is the phase instruction

REV. For reverse indication

Pulse indication for power measurement

Ordering Information

Item	Description
APM986-DIN-220-20	APM986 DIN rail three-phase electronic watt-hour power meter 220 V AC, 20(40) A, 50Hz

Contact Information

Ascent Communication Technology Ltd

AUSTRALIA

140 William Street, Melbourne
Victoria 3000, AUSTRALIA
Phone: +61-3-8691 2902

HONG KONG SAR

Unit 9, 12th Floor, Wing Tuck Commercial Centre
177 Wing Lok Street, Sheung Wan, HONG KONG
Phone: +852-2851 4722

CHINA

Unit 1933, 600 Luban Road
200023, Shanghai CHINA
Phone: +86-21-60232616

USA

2710 Thomes Ave, Cheyenne
WY 82001, USA
Phone: +1-203 816 5188

EUROPE

Pfarrer-Bensheimer-Strasse 7a
55129 Mainz, GERMANY
Phone: +49 (0) 6136 926 3246

VIETNAM

15 /F TTC Building, Duy Tan Street, Cau Giay Dist.
Hanoi, VIETNAM
Phone: +84 243 795 5917

WEB: www.ascentcomtec.com **EMAIL:** sales@ascentcomtec.com

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