

DESCRIPTION

The A210 Power Meter measures and displays voltage, current, power, and energy quantities in single-phase or three-phase power systems. The meter's multifunction capability replaces a large number of analog measurement and display devices.

A high-contrast LED display in a compact, panel-mount package provides low-cost, high-visibility control panel monitoring. The basic instrument provides up to 63 measurements that can be displayed on three 4-digit LED displays.

Two solid-state relay/pulse outputs can be used as high/low limit alarms on selected measurements or as energy pulse outputs. Scaling of inputs for direct reading in primary values is provided.

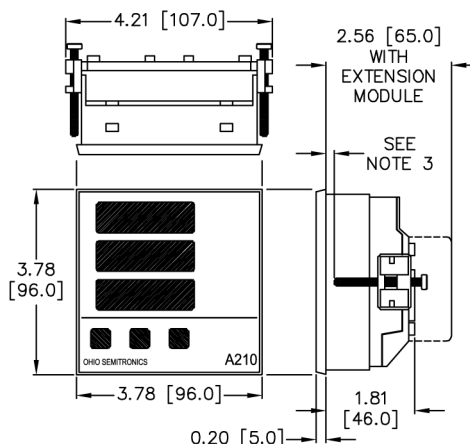
An extension module is available to extend the A210's function and flexibility. The MM/COM module provides RS-232/485 with MODBUS RTU communication protocol. The module also provides for load profile recording of active and/or reactive power quantities for up to 83 days at 15-minute intervals. Available software provides programming of the instrument, reading and retrieval of the recorded data. A pulse input can be used for synchronizing profile data timing or switching between high/low tariff energy metering with this option.

FEATURES

- Measurement of current, voltage, active, reactive and apparent power, active and reactive energy, power factor and line frequency
- Single-Phase Three-Wire or Three-Phase Four-Wire Sinusoidal Measurements.
- Simultaneous display of up to three measurements with 4-digit red high-contrast LED displays
- Installation size of 96mm x 96mm panel, 46mm depth behind panel (65mm with MM/COM module)
- Two pulse/relay outputs can be used for limit alarms or energy pulse outputs
- MM/COM optional extension module can be added for communications and load profile memory



OUTLINE AND DIMENSIONS



- NOTES:
1. ALL DIMENSIONS IN INCHES [MM]
 2. PANEL CUTOUT -
INCHES - 3.62 (+0.03/-0.00) X 3.62 (+0.03/-0.00)
MM - 92 (+0.8/-0.0) X 92 (+0.8/-0.0)
 3. PANEL DIMENSIONS (THICKNESS, MIN-MAX) -
INCHES 0.08-1.00
MM 2-25.4

SPECIFICATIONS

DISPLAY 7-segment red LED
 Character Height.....0.55in/14mm
 Display Range.....Max. 9999
 Energy.....Max 99999999

INPUT
 Voltage.....Nominal 500 V_{LL} 290 V_{LN}
 Over-range Nominal +20%
 Current..... (A210-001/002)..... Nominal 5A
 (A210-003/004)..... Nominal 1A
 Over-range Nominal +20%
 Overload.....2X Nominal Continuous
 Frequency.....45-65Hz

ACCURACY (% of Nominal)
 Current..... ±0.5%
 Voltage..... ±0.5%
 Power..... ±1.0%
 Power Factor..... ±1.0%
 Frequency..... ±0.02 Hz
 Energy..... ±1.0%
 Response Time.....400ms

INSTRUMENT POWER
 A210-001/00385-253V, dc or 45-400Hz
 A210-002/00420-70V, dc or 45-400Hz
 (3VA without MM/COM module, 4VA with MM/COM module)

OUTPUT
 Pulse/Limit Alarm Outputs..... (2ea)
 Outputs: passive, opto-isolated common-collector transistors
 Vce40Vdc maximum
 Vsat1.2Vdc maximum
 I_{max}.....150mA
 Pulse Duration.....100ms

MM/COM MODULE (OPTION)
 Interface RS-232/485
 Protocol MODBUS RTU
 Baud.....1200, 2400, 4800, 9600, 19200
 Memory15936 values
 (records 2 quantities for 83 days at 15-min intervals)
 Digital Input Contact Closure Synchronizing Input
 or HI/LO rate (tariff) select.

ENVIRONMENTAL
 Operating Temperature -10°C to +55°C
 Storage Temperature.....-25°C to +70°C

MECHANICAL
 Dimensions.....3.8" x 3.8" x 1.8"
 (2.6" depth behind panel with MM/COM module)
 Panel Cutout.....3.6" x 3.6"
 Net Weight.....8.8oz