

SPECIFICATIONS

METER FORMS

Meter Forms: 5, 6, 8, 9, Universal

INPUTS

Voltage

- 55-530 VAC auto-ranging
- Burden*: 0.5 VA @ 530V
- *Does not include auxiliary power requirements.

Current

- 1 Amp: ANSI Class 2
- 5 Amps: ANSI Class 10
- 10 Amps: ANSI Class 20
- Burden: 0.5 VA maximum
- Overload: 1.5x rated class current continuous, 20x rated class current for 0.50 sec
- Frequency range: 45-55 Hz, 55-65 Hz

AUXILIARY POWER

55 – 530 VAC, 90 – 250 VDC

S-base and A-base

- Normally derived from A-phase voltage input

Switchboard

- Separate terminals, AC or DC

Auxiliary Power Burden

- 15 VA maximum

ACCURACY

Watt-hour

- 0.07% Reading (0.03% Typ.)

Clock

- Synchronized to line or ± 3 minutes per month maximum error for internal reference.

Loss Compensation

- Transformer Loss Compensation (TLC) and Line Loss Compensation (LLC)
- PT and CT Error Gain Correction

MEASUREMENTS

Energy PolyPhase Quantities

- Watthour, VARhour, VAhour, Amphour, Qhour

Energy Per Phase Quantities

- Watthour, VARhour, VAhour, Amphour, Qhour

Instantaneous Quantities

- Per phase: \pm Watts, \pm VARs, Quadrant VARs, \pm VA, \pm Q, PF, Volts, Volts THD, Amps, Neutral Current, Amps THD, Volts², Amps²
- System: \pm Watts, \pm VARs, Quadrant VARs, \pm VA, \pm Q, PF, Volts, Amps, Amps², average Volts, frequency

REGISTERS

50 Normal, 50 Alternate, 50 Test Demand Registers

- Fixed or sliding window
- Interval length: 1-60 minutes

LOAD PROFILE

4 channels of storage (standard)
12 channels of storage (optional)

Programmable Interval

- 1-60 minutes

45 days storage using four channels at 15-minute intervals

TOTALIZATION (OPTIONAL)

Up to 2 contact inputs

Up to 12 totalization measurements displayed and recorded

POWER QUALITY (OPTIONAL)

Configurable thresholds for voltage sags and swells per phase

Records start and duration in cycles

Records min/max/avg voltage and current per phase, avg power factor

Stores up to 100 events

Maximum event length of 600 cycles

DIGITAL INPUTS/OUTPUTS (OPTIONAL)

DI/DO option: Two Form-A contact inputs and four Form-A solid-state outputs

5 KYZ option: Two Form-A contact inputs and five Form-C solid-state outputs (only one option available at a time)

Contact Inputs

- Maximum voltage 40 VDC
- User-configurable for: pulse counter, interval synchronization pulse, TOU rate override, status input, totalization

Solidstate Outputs

- Maximum open-circuit voltage: 200V DC or peak AC
- Maximum switching current: 50 mA
- User-configurable for: any consumption quantity, energy pulse (KYZ), site monitor alarm, threshold alarm, demand sync, voltage sag/swell alarm, system error alarm

ANALOG OUTPUTS (OPTIONAL)

- Three independent outputs 0 \pm 1 mA or 4-20 mA

- User-configurable for any instantaneous quantity

COMMUNICATIONS

Optical Port (Standard)

- Type 2 – 19,200 Baud

One Comm option board per meter
Serial Port Board

- Single or dual serial port
- RS-232 or RS-485
- User configurable: 300 to 38400 baud

Internal Modem Board

- 14,400 baud
- With optional serial port (RS-232 or 485)
- With optional phone home on power fail
- With optional RS-485 Communication Repeater

Ethernet Board

- 10 baseT, unshielded twisted pair
- Up to 4 simultaneous connections and 2 Web Browser sessions
- Up to 4 simultaneous connections
- With serial port (RS-232/485)

Optional Communication Protocols

- Modbus ASCII, RTU, TCP/IP
- DNP 3.0
- ANSI Tables
- JEM Binary (included)

MECHANICAL

Case Styles

- Socket connected (S-base), small switchboard case, bottom connected (A-Base), meter retrofits (JEM-2 and others)

Size and Weight

- S base: 5.5 pounds
- A-base: 7.5 pounds
- Switchboard case: 11.5 pounds

ENVIRONMENT

Operating Temperature

- -40° to 185°F (-40° to 85°C)

Storage Temperature

- -40° to 185°F (-40° to 85°C)

Humidity

- 5 to 95% relative humidity, non-condensing

Surge Withstand (SWC)

- ANSI Standard C37.90.1-1989, ANSI Standard C62.41

Fast Transient

- IEC Standard 687 Section 5.5.4

STANDARDS

Agency Standards and Certifications:

- ANSI Standard C12.16-1991
- ANSI C12.20-1998 Accuracy 0.2%
- IEC Standard 687 Class 0.2
- FCC Part 68, FCC Part 15
- IEC 60687
- CE
- Measurement Canada, Ontario IESO
- California ISO, NY PSC
- Mexico LAPEM
- Venezuela Sencamer