ENCORE SERIES / 61000 SYSTEM

VOLTAGE MODULES

- Channels: (4) differential inputs, AC/DC
- Sampling: 512 samples/cycle, 16bit A/D, synchronous sampling. Range: 1-600 Vrms, +/- 1000VPK
- Frequency: 16/20Hz, 50Hz, 60Hz, 400Hz (optional)
- Full Scale Accuracy: 0-600V 0.1% reading +/- 0.05% full scale, 7KHz bandwidth for low/medium frequency transients
  100-300V AC 0.1% reading for IEC61000-4-30
- Input impedance: 10MΩ to ground
- Choice of connections: Screw terminals, safety connectors, D connector for use with (optional) remote pod with screw terminals. Choose one.
- Optional: Anti Aliasing filters
- Optional: High Speed transients (total of 2 slots)
  - Sampling: 1MHz
  - Accuracy: +/-10% reading, +/- 0.5% full scale

CURRENT MODULES

- Channels: (4) differential inputs, AC/DC
- Sampling 512 samples/cycle, 16 bit A/D. Range: Full scale current = 1.5Vrms, crest factor of 3
- Accuracy: 0.1% reading +/- 0.05% full scale, 3KHz bandwidth for low/medium freq. transients. Does not include CT.
- Choice of connections: TR connectors, D connector for use with (optional) remote 5A or 1A pod with screw terminals or 5A/20X pod with feed through tubes. Choose one.
- Optional: Anti Aliasing filters
- Optional High Speed transients
  - Sampling: 1MHz
  - Accuracy: +/-10% reading, +/- 0.5% full scale

VOLTAGE TRANSDUCER INPUT MODULE

- Channels: (4) differential inputs, DC coupled
- Sampling: 100KHz. Range: 0-24VDC
- Accuracy: 0.1% reading +/- 0.05% full scale plus transducer accuracy
- Input impedance: >100KΩ to ground
- Connections: Screw terminals

CURRENT INPUT TRANSDUCER INPUT MODULE

- Channels (4) differential inputs, DC coupled
- Sampling: 100KHz. Range: 4-20ma
- Accuracy: 0.1% reading +/- 0.05% full scale plus transducer accuracy
- Connections: Screw terminals

DIGITAL INPUT MODULE

- Channels: (8)
- Sampling: 1KHz. Range: 0-135V AC/DC
- Triggers: Edge, level
- Connections: Screw terminals

RELAY OUTPUT MODULE

- Channels: (4)
- Max voltage 250VAC/DC
- Type: Form C

MONITORING/COMPLIANCE

- IEC61000-4-30 Class A, IEC61000-4-7, IEC61000-4-15
- EN50160, NVE, IEEE1159, IEEE1453, IEEE519, IEEE1459
- IEC61000-3-6/7

REVENUE ACCURACY

- ANSI C12
  - ANSI C12.1 Accuracy compliant
  - ANSI C12.20.0.2 compliant
- IEC
  - IEC 60687 0.2S compliant
  - IES 60687 accuracy class 0.5S compliant

POWER QUALITY TRIGGERS

- V & I RMS (Sag/Dip, swell, interruption) 1 cycle resolution, ½ cycle steps as per IEC61000-4-30
  - Reference: L-L, L-N
  - Pre/Post cycles : 30 pre (max), 10,000 post (max)
- Transients:
  - Waveshape Triggers: Cycle by cycle, RMS deviation
  - High speed transients (optional)
  - Peak transient
- Journals (stored parameters): High, low, very-high, very-low

MEASURED PARAMETERS (NOT LIMITED TO THE FOLLOWING)

- Power
  - V, I, W, VA, VAR, TPF, DPF, Demand, Energy, etc.
- Harmonics/Interharmonics/Distortion (per IEC61000-4-7)
  - Harmonics individual harmonic spectrum to the 63rd for V & I
  - Vthd, Ithd, Vtid, Itid, K factor, TDF, TIF, more
  - 5 user specified frequencies
  - Unbalance: Symmetrical components, worst from ave.
- Flicker (per IEC61000-4-15, IEEE1453): Pst, Plt, sliding Plt

COMMUNICATIONS:

- 10/100BaseT Ethernet, RS232, RS485, USB (future functionality)
- Optional GSM/GPRS, Analog modem
- Protocols: XML, Modbus TCP/RTU, HTTP
- Time synchronization: NTP, optional GPS

USER INTERFACE

- Remote: Web browser via Encore Series Software:. Primary UI for setup, trends, reports, real time. Available languages; English, Spanish, French, German, Italian. Instrument web browser for metering. English only.
- Optional Local Display: ¼ VGA touch screen remote display, rack mounted display. Languages: 12

GENERAL SPECIFICATIONS

- Size (HxWxD): 4" x 11" x 8" (10.2cm x 28cm x 20.3cm), Weight: 4.2 pounds (1.9 kg)
- Operating Temperature: -10º to 60º C
- Storage Temperature: -40º to 85º C
- Humidity: 10 to 95% non-condensing
- System Time Clock-Crystal controlled-1 ms resolution
- Power supply: 12VDC
  - 15 minute internal UPS
  - AC supply: 90-264 VAC 47-63 Hz
  - Optional 125VDC, 220VDC, 48VDC
- Memory 1GB, internal

SYSTEM CONTROLLER

- Industrial grade computing platforms: InfoNode model 5502 (CF memory), 5504 (hard disk). Choose one.

MISCELLANEOUS OPTIONS

- Enclosures: Weather resistant, rack, wall, switchgear
- CT's: Clamp-on, split core, solid core, flex, DC

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