Bitronics® M350

Bitronics has been providing excellence in digital metering for local indication and SCADA communications for over 15 years. The Bitronics 50 Series of SCADA meters continues this tradition of excellence, providing single function and multifunction solutions for 3-phase metering. The Bitronics M350 is a family of three-phase meters for voltage and current measurement. The M350 meters have large displays, are simple to set up and use, and offer superior communications flexibility. The M350 meters have the following features:

Bitronics M350 Voltmeter

Display

- 3-line at once, easy-to-read, long-life LED displays that can be read from far away in all substation conditions including bright sunlight
- Ultimate precision with five digits per line
- LEDs light up to show volts, kVolts, amps, or amp demand
- Easy setup and scrolling from front display with "Touch-Sense" buttons

Communications

- DNP3 or Modbus protocol available via configurable RS-232/ RS-485 serial port
- No need for PC software - RJ45 service port provides access to web server in the instrument so meters can be interfaced with just a web browser for viewing and configuration
- Available Ethernet to provide DNP3 or Modbus TCP/IP protocol
- Optional fiber port that replaces standard Ethernet service port and includes Modbus and DNP3 Ethernet protocol support
- Optional transducer output to interface with older generation RTUs

Measurements

- Either 3-phase voltage including avg/min/max voltage or 3-phase amperes with amp demand
- Accuracy is 0.1% of reading for volts and amps
- Updates every 100ms

Built for the Substation

- Wide-range universal power supply for all substation installations
- Rugged aluminum case
- Reduce inventory cost as one voltmeter model covers all voltage wiring options
- Easy to mount with standard 4" round meter

The M350 places a great deal of emphasis on simplicity. All of the primary settings can be programmed using the front display buttons. Simple and advanced settings are easily configured through the Ethernet service port. Pre-set register/point sets and display screens coupled with the universal power supply and universal wiring make it easy to go from the box to up and running in no time.

Applications

- Digital front-end to SCADA systems
- Intelligent Electronic Device (IED) interfacing to RTUs and PLCs
- Local indication of substation conditions
- Plant equipment monitoring
- Line monitoring

Specifications

Dimensions: 4.5" (w) x 4.5" (h) x 6.5"(d)
Weight: 1.8 lbs.
Power Supply: Universal 48V dc to 240V ac nominal
Current Inputs: 1 or 5A nominal to maximum of 2A or 10A (2x overload)
Voltage Inputs: 120V ac nominal, 45-65Hz
Outputs:

- Optional Configurable RS-232/RS-485 port , configurable from 9600 to 57,600 baud
- Standard RJ45 10BaseT/100BaseTX port for service port functions, optional Modbus or DNP3 TCP/IP and UDP support
- Optional LC 100Base FX fiber port replaces the standard RJ45 port and provides Modbus TCP/IP, DNP3 TCP/IP and UDP support

Optional transducer output: Three 0-1mA (active) or 4-20mA (loop powered, passive)
Environmental:

- Operating temperature range -40 to 70C, storage temperature -40 to 85C
- Humidity 0-95% non-condensing
- Surge withstand to ANSI/IEEE C37.90.1: 2002
- UL/CSA Recognized, File Number E164178, CE Marked

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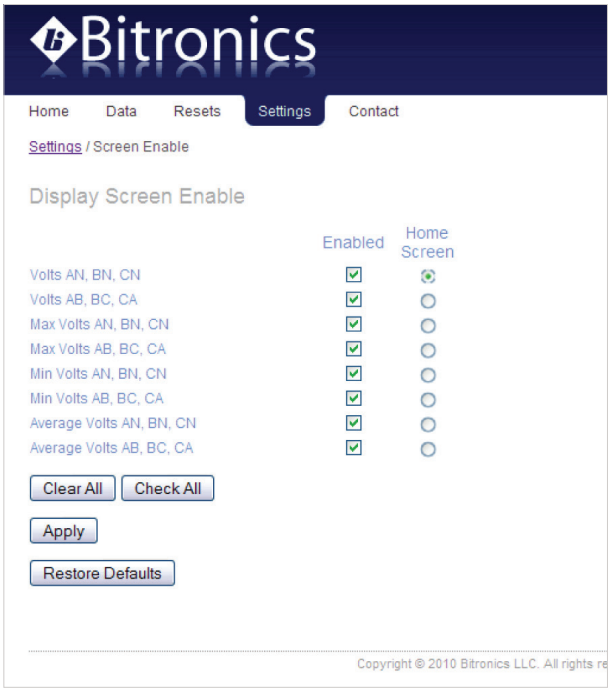
Available Measurements		
Available Measurements	**M350 A3**	**M350 V3**
Amps A, B, C, Residual	x	
Demand/Max. Amps A, B, C, Residual	x	
Volts AN, BN, CN, NG, AB, BC, CA		x
Average/Min/Max Volts AN, BN, CN, NG, AB, BC, CA		x



Setup of M350 V3 voltmeter display screens from standard web browser.

M350 offers five digits of precision and easy recognition of measured values via fourth display line with backlit LEDs. Most settings can be made using "touch sense" buttons on front. Setting category (Network in above example) lights up to assist with front display setup.

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WORLDWIDE HASSLE-FREE 10 TEN YEAR WARRANTY

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