

Description

The Autani *E50C2* Packaged Meter is a power monitoring device featuring revenue grade measurement and wireless communication. The Packaged Meter is for use with Autani's *EnergyCenter* measurement and verification software, and can add real-time energy monitoring to an *EnergyCenter* Integrated Energy Management solution that includes lighting and HVAC.

The *E50C2* is compatible with voltage ranges from 100-277VAC and features load sensing from 5A to 32,000A. The meter is provided as a self-contained unit in a NEMA-4 enclosure with locking door. Featuring accurate revenue grade measurement, the *E50C2* is used in conjunction with *EnergyCenter* software to measure and track energy use for a specific area, load type, or building.

Communication with other Autani Meters, the Autani *Manager* appliance running *EnergyCenter* software, and other *EnergyCenter* devices (such as lighting and HVAC controls) is via *autaniNet*, a reliable wireless mesh network.

Applications

E50C2 packaged meters are suitable for renovation, upgrade, and new construction projects.

- Private & Open Offices
- Corridors & Hallways
- Classrooms & Gyms
- Warehouse Spaces & Manufacturing Areas
- Patient Care Rooms
- Transportation Terminals
- Retail & Grocery Stores



Features

- Compact solution for monitoring energy consumption per panel, circuit, or feed for a facility or campus
- Easy to install wall-mounted, locking enclosure
- Compatible with voltages from 100-277VAC, 50-60Hz
- Available Current Transformers (CTs) from 5A to 32,000A
- Revenue grade cost allocation with ANSI C12.20 0.5% accuracy (IEC 62053-22 Class 0.5S)
- *autaniNet* secure wireless 2.4GHz communications with other network devices
- Easy way to add metering & verification to Autani *EnergyCenter* systems
- Assembled with UL and CE Listed components
- **Designed & Made in the USA**

Specifications

INPUTS

- Voltage Input: 100-277VAC
- Current Input Scaling: 5A to 32,000A
- Input Range: 0 to 0.333V or 0 to 1V (selectable)

INPUT VOLTAGE CHARACTERISTICS

- Measured AC Voltage: 100-277VAC
- Metering Over-Range: +20%
- Impedance: $2.5 \text{ M}\Omega\text{-N} / 5 \text{ M}\Omega\text{-L}$
- Frequency Range: 50-60Hz

INPUT CURRENT CHARACTERISTICS

- CT Scaling/ Primary: Adj. from 5A to 32,000A
- Measurement Input Range: 0 to 0.333VAC or 0 to 1.0VAC (+20% over-range)
- Impedance: $10.6 \text{ k}\Omega$ (1/3V mode) or $32.1 \text{ k}\Omega$ (1V mode)

ACCURACY

- Real Power and Energy: 0.5% (ANSI C12.20, IEC 62053-22 Class 0.5S)
- Reactive Power and Energy: IEC 62053-23 Class 2, 2% Current
- Current: 0.4% (+0.015% per °C deviation from 25°C) from 5% to 100% of range; 0.8% (+0.015% per °C deviation from 25°C) from 1% to 5% of range
- Voltage: 0.4% (+0.015% per °C deviation from 25°C) from 90VL-N to 600VACL-L
- Sample Rate: 2520 samples per second
- Data Update Rate: 1 sec
- Type of Measurement: True RMS up to the 21st harmonic 60Hz, one to three phase AC system

RADIO NETWORK (autaniNet)

- IEEE 802.15.4-2003 2.4GHz ISM
- FCC ID: V8NZRB1000152 & IC: 7737A-ZRB1000152
- Range: Up to 2000' LOS transmit/ receive

ENVIRONMENTAL

- Operating Temperature: -30° to 60°C (-22° to 158°F)
- Storage Temperature: -40° to 85°C (-40° to 185°F)
- Humidity Range: <95% Relative Humidity, noncondensing
- Altitude of Operation: 3 km max.

PHYSICAL

- Dimensions (HxWxD): 7.06 x 7.19 x 4.75 in
- Color: White case with smoked transparent door
- Weight: 2.5lbs / Mounting: NEMA 4 enclosure

METERING CATEGORY

- US and Canada: CAT III; for distribution systems up to 347 VL-N/ 600VACL-L
- Dielectric Withstand: Per UL 508, EN61010
- Conducted and Radiated Emissions: FCC part 15 Class B, EN55011/EN61000 Class B (residential and light industrial)
- Conducted and Radiated Immunity: EN61000 Class A (heavy industrial)

Ordering Information

SKU	Description
A03-10-0145-01	E50C2 Packaged Meter Power/ Energy Monitor with wireless communication <i>Requires (1) CT per phase</i>
Optional Accessories	
A03-10-0421-01	H6810-100A-.3V Split Core CT
A03-10-0422-01	H6810-200A-.3V Split Core CT
A03-10-0423-01	H6810-300A-.3V Split Core CT
A03-10-0423-02	H6811-400A-.3V Split Core CT
A03-10-0423-03	H6811-600A-.3V Split Core CT
A03-10-0423-04	H6811-800A-.3V Split Core CT
A03-10-0423-05	H6812-1000A-.3V Split Core CT
A03-10-0423-06	H6812-1600A-.3V Split Core CT
A03-10-0423-07	H6812-2000A-.3V Split Core CT
A03-10-0423-08	H6812-2400A-.3V Split Core CT

Dimensions

