



Smart Panel™ 3000

Energy Management System

Extends the Smart Grid to your Electrical Panel

Dynamic Demand Management (Solar factored)

Measures and Analyzes Energy Use - 1% Accuracy Standard

Autonomous Demand Control

Notifications Sent Via Text Message or Mobile App

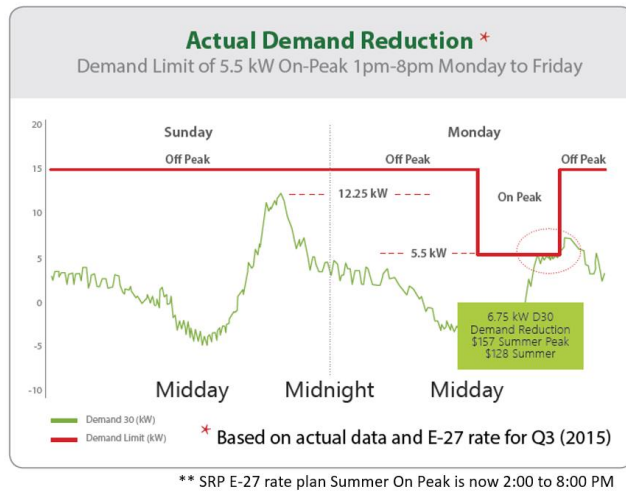
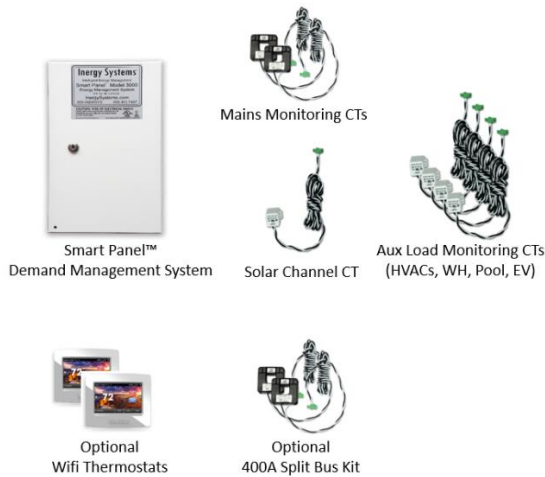
Monthly Report Summaries

Tracks to Utility Rate Cost Structures Including TOU and Peak Demand Rates

For Residential and Commercial use - Single and 3-phase

NEMA 3R Enclosure for Indoor and Outdoor Installations (-40-140F)

UL Listed, FCC Class B Compliant



Cloud Service (browser portal) Provides Detailed Data for Customers and Energy Managers

Mobile App provides real-time energy status & access to common control features

Monitors Primary Mains and Secondary Circuits

Supports Solar Generation and Net Metering

Control Channels – 4 x 30A Relays (expandable to 8) plus 4 Wi-Fi T-stats for HVAC

Direct inquiries to: store@inergysystems.com





TECHNICAL

Power Supply - 95-265 VAC, 50/60 Hz, 10 W (Powered from L1 on standard model)

Service Type (Std.) – 120/240V Single-Phase, 208V Three-Phase 4-Wire Wye, and 120/240V High-Leg Delta

Power Output - USB Regulated 5VDC output, 500 mA Maximum.

Primary Voltage and Current Inputs:

Voltage Channels (Std.) – [L1-L3], 265 Volts AC Line-to-Neutral, 458V Line-to-Line, CAT III

Voltage Channels (HV) – [L1, L2, L3], 600 Volts AC Line-to-Neutral and Line-to-Line, CAT III

Current Channels – [CT1-CT-4], 333 mVacrms / 666 mVacrms F.S. Software Selectable,

150% over-range on both scales, 1-6,000 Amps F.S. depending on CT

Current Channel Limits – 12 Vdc maximum, current must be limited to 50 mA continuous

Measurement Type – Polyphase Multifunction Energy Metering Digital Signal Processor (DSP)

Line Frequency – 50/60 Hz

Waveform Sampling – 8 kHz

Analog Bandwidth – 2 kHz

Parameter Update Rate – Power Measurements at 1/sec., all others at twice line frequency

Measurements – (Voltage & Current Channels 1-3) Volts, Amps, kW, kWh, kVAR, kVARh, kVA, kVAh, PF

– (Current Channel 4) Amps, kVA, kVAh

Accuracy (Standard) – 1% (<0.5% typical) for V, A, kW, kVAR, kVA, PF

Resolution – 0.01Amp, 0.01 Volt, 0.01 Watt, 0.01 VAR, 0.01 VA, 0.01 PF

Auxiliary Current Inputs:

Current Channels – [CT5-CT8], 333 mVacrms F.S., 248% over-range, 1-6,000 Amps F.S. depending on CT

Current Channel Limits – 12 Vdc maximum, current must be limited to 50 mA continuous

Line Frequency – 50/60 Hz

Waveform Sampling – 1.3 kHz

Analog Bandwidth – 17.7 kHz

Parameter Update Rate – 1/sec.

Measurements – Amps, kVA, kVAh

Accuracy – 1% typical for Amperage

Accuracy – 2% typical for kVA, kVAh

Minimum required current signal for reading is 1% of full scale

Button Switch - Reset and Diagnostic Function Select

Indicators - 3 LEDs (green): 1 LED to indicate power and status, 1 LED to indicate LAN communication, 1 LED to indicate internet communications.

COMMUNICATIONS

Ethernet – 10/100 Mbps

USB – 2.0 Host

Security – Inergy Cloud Service uses 2048-bit TLS 2.1 HTTPS connections. Two-factor authentication is supported.

Telemetry communications use Dynamic Key Access with 250 Character Encryption.

MECHANICAL

Operating Temperature -40° to 60°C (-40° to 140°F)

Humidity 5% to 95% non-condensing

Enclosure NEMA-3R White Epoxy Coated Steel

Weight 4.5kg (10 lb)

Dimensions - 22.6cm (8.9") W, 39.9cm (15.7")

H, 12.4cm (4.9") D

CERTIFICATIONS – UL File E96206, FCC

CONTROL RELAY SPECIFICATION

Number of Relay Channels – 4

Relay Type - Single Pole Single Throw Latching Type (no hold current)

Contact Rating - 30A @ 277 Vac

HVAC THERMOSTAT SPECIFICATION

Number of Thermostat Channels - 4

Compatible with most HVAC systems

24VAC w/common wire (required for WiFi operation)

Single and two stage conventional heating and cooling

systems plus heat pumps with auxiliary heat

Zoned forced air