



Hardware



Software



Services



Meters / Controllers

3612 | 1204 | BASIC

GridPoint metering and control devices provide powerful real-time tools that measure, control, store, and transmit energy consumption data from diverse energy endpoints. They can be programmed to implement various energy efficiency and facility operational strategies for a single building or an entire enterprise.

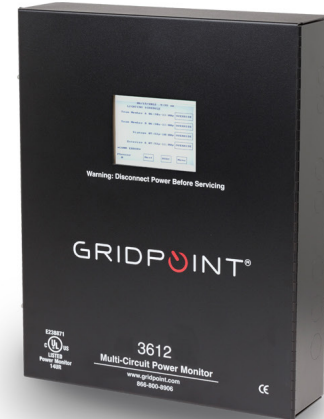
Individual buildings or thousands of buildings can be integrated and managed on-site or remotely. Preventive maintenance and equipment thresholds can be set to issue automatic alerts via GridPoint Energy Manager, an intuitive, web-based dashboard, so that expensive equipment can be proactively serviced before failures occur. Industrial-grade, embedded microprocessor designs combined with customizable firmware allow you to design your system to best meet your needs.

These flexible devices can provide monitoring and/or control for a wide range of endpoints, including:

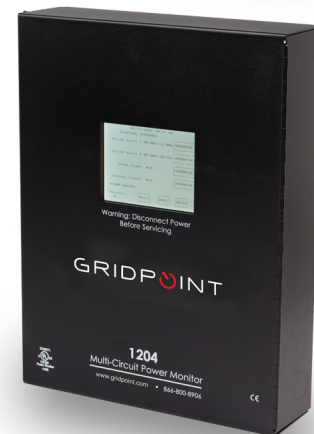
- HVAC systems
- Lighting (interior and exterior)
- Marquee and store signage
- Humidity and air quality
- Emergency lighting systems
- Trash compactors
- Alarm panels
- Freezers/coolers
- Kitchen equipment
- Hot water heaters
- Motion sensors

Feature Highlights

- Dynamic demand limiting and energy optimization algorithms
- Third party interfaces for popular HVAC systems and lighting controllers
- Whole building or equipment-level load profiling
- Ability to handle multiple communications protocols
- Open, flexible protocols with dial-in/out, Ethernet, or cellular connectivity



3612



1204



BASIC



Integrated Multi-Circuit Power Monitoring

The 3612 and 1204 devices contain patented technology that provide built-in revenue-grade accurate metering and power monitoring down to the sub-cycle level. This enables you to benefit from dynamic demand-limiting algorithms, which manage peak kW by means of intelligent and predictive methods.

Multiple inputs allow separate submetering of individual loads. Both the 3612 and the 1204 can be configured to count pulses, sense contact status, and provide alarm notification for a variety of input thresholds.

The advanced electric power monitoring capabilities of the 3612 and 1204 include:

- True RMS, four quadrant, multi-circuit power monitoring
- Three voltage inputs for measurement and one voltage input for auxiliary power
- Measured quantities:
 - Voltage: L-L, L-N
 - Current: per circuit
 - Real power (watts) and energy (watt-hours): per phase, polyphase or totalized
 - Reactive power (VAR) and energy (VAR-hours): per phase, polyphase or totalized
 - Apparent power (VA): per phase or polyphase
 - Power factor: per phase or polyphase
 - Frequency
 - Total Harmonic Distortion (THD): voltage and current
- Measurement values available as:
 - Instantaneous (real-time)
 - Integration (register “dial” readings)
 - Historical, time-stamped data logging (load profile): average value over a configurable data interval (5 minute, 15 minute, etc.)
- ANSI C12.1-2001 revenue accuracy (overall accuracy dependent upon current sensor selection)

Touchscreen Display

Equipped with an integrated touchscreen graphical display, each device serves as a powerful, secure two-way local interface. Entry of security codes can be required to limit access as desired. Through this interface, local personnel can:

- Temporarily override or permanently change lighting schedules, HVAC setpoints, and other facility operational parameters
- Display detailed data to facilitate maintenance and operational efficiencies
- Modify site-specific device configuration parameters

Communication Ports

Each device contains onboard Ethernet as well as a universal socket modem (optional) to enable either traditional analog phone line or wireless cellular connectivity. In addition, each unit features four serial ports: two RS485 and two RS232. These ports can be configured with multiple protocols, such as Modbus RTU. Since the ports can operate with different protocols simultaneously, our devices can act as protocol converters, interfacing with a wide variety of third-party meters and devices.

Thermostat and Lighting Controller Interfaces

Control the HVAC system through communicating thermostats and interior and exterior lighting through communicating lighting control panels. Smart algorithms provide dynamic demand control. Setback programmable schedules may be employed to achieve additional energy savings.

Extensive Onboard Data Logging

Large volumes of time-stamped trend data can be stored for later retrieval. Stored data can include a wide range of energy and environmental measurements as well as operational logs. This continuous, detailed stream of information is essential for a highly efficient and sustainability management program.

3612, 1204, and BASIC Meters / Controllers - Features and Specifications

	3612	1204	BASIC
Measurement voltage inputs	<ul style="list-style-type: none"> • 120/208 VAC • 277/480 VAC • Single polyphase 	<ul style="list-style-type: none"> • 120/208 VAC • 277/480 VAC • Single polyphase 	N/A
Auxiliary/control power voltage requirements	120 or 240 VAC ± 20%	120 or 240 VAC ± 20%	15-28 VAC or VDC
Analog input options: <ul style="list-style-type: none"> • Current transformer (CT) inputs for electric power measurements • General purpose signal voltage inputs 	<ul style="list-style-type: none"> • 36 inputs for use with voltage output CTs: 0.3333 or 0.5000 VAC • 36 inputs configurable for 0-1 VDC or 4-20 mA inputs with dropping resistor 	<ul style="list-style-type: none"> • 12 inputs for use with voltage output CTs: 0.3333 or 0.5000 VAC • 12 inputs configurable for 0-1 VDC or 4-20 mA inputs with dropping resistor 	N/A
Digital inputs (dry contacts)	2 optically isolated	2 optically isolated	N/A
Digital outputs (low voltage/current)	2 outputs, 30 VDC @ 25 mA max	2 outputs, 30 VDC @ 25 mA max	N/A
Local display	4.8" H x 3.5" W QVGA graphical LCD touchscreen	4.8" H x 3.5" W QVGA graphical LCD touchscreen	4.8" H x 3.5" W QVGA graphical LCD touchscreen
Onboard telephone modem (optional)	56k, dial out, off-hook detection, RJ-11	56k, dial out, off-hook detection, RJ-11	56k, dial out, off-hook detection, RJ-11
TCP/IP Ethernet	10/100 RJ-45	10/100 RJ-45	10/100 RJ-45
RS485 ports	<ul style="list-style-type: none"> • 1 port, 4-wire • 1 port, 2-wire 	<ul style="list-style-type: none"> • 1 port, 4-wire • 1 port, 2-wire 	<ul style="list-style-type: none"> • 1 port, 4-wire • 1 port, 2-wire (1 port configurable as 2nd RS232)
RS232 ports	<ul style="list-style-type: none"> • 1 port for general use • 1 port for maintenance use 	<ul style="list-style-type: none"> • 1 port for general use • 1 port for maintenance use 	<ul style="list-style-type: none"> • 1 port for general use • 1 port for maintenance use
Onboard, long-term data storage	~72,200 time-stamped trend data values	~72,200 time-stamped trend data values	~72,200 time-stamped trend data values
Certifications and compliance	CE, UL/CUL listed, UL61010C-1, (E238871)	CE, UL/CUL listed, UL61010C-1, (E238871)	CE, UL/CUL listed, UL61010C-1, (E238871)
Power measurement accuracy	Meets or exceeds ANSI C12.1-2001	Meets or exceeds ANSI C12.1-2001	N/A
Frequency range	50-60 Hz	50-60 Hz	50-60 Hz
Temperature / humidity operating ranges	<ul style="list-style-type: none"> • -20°C to +70°C • 0 to 95% relative humidity (non-condensing) 	<ul style="list-style-type: none"> • -20°C to +70°C • 0 to 95% relative humidity (non-condensing) 	<ul style="list-style-type: none"> • -20°C to +70°C • 0 to 95% relative humidity (non-condensing)
Enclosure	<ul style="list-style-type: none"> • 20.3" H x 16.5" W x 4.5" D • Dust-resistant steel • Knockouts: .5", .5" & 1" 	<ul style="list-style-type: none"> • 18.0" H x 14.0" W x 4.0" D • Dust-resistant steel • Knockouts: .5", .5" & 1" 	<ul style="list-style-type: none"> • 8.0" H x 8.5" W x 2.0" D • Aluminum
Shipping weight	29 lbs.	25 lbs.	2 lbs.

Multi-circuit polyphase electric power monitoring:	3612	1204	BASIC
• Commercial/industrial submetering	36 circuits	12 circuits	N/A
• Tenant cost allocation	36 circuits	12 circuits	N/A
• Peak demand projection	36 circuits	12 circuits	N/A
Energy management/building automation:			
• HVAC control (multiple units)	✓	✓	✓
HVAC performance monitoring:			
• Supply air temperature	✓	✓	✓
• Runtime (by stage)	✓	✓	✓
• Filter condition (differential pressure)	✓	✓	Note 1
• Electrical load	✓	✓	N/A
Lighting control	✓	✓	✓
Electric demand control	✓	✓	N/A
Building total electric load/utility meter verification	✓	✓	N/A
Occupancy monitoring	✓	✓	Note 1
Door monitoring	✓	✓	Note 1
Gas/water monitoring	✓	✓	Note 1
Environmental monitoring:			
• Space temperature	✓	✓	✓
• Freezer/cooler temperature	✓	✓	✓
• Relative humidity	✓	✓	✓
• Air quality	✓	✓	Note 1
• Building pressure	✓	✓	Note 1
• Light intensity	✓	✓	✓
Emergency lighting monitoring, control, and automated testing (NFPA 101)	✓	✓	N/A
Security system interface	✓	✓	Note 1
Multi-input pulse counter/totalizer	38 inputs max.	14 inputs max.	N/A

Note 1: External modules are available to provide this additional capability
N/A = Not Applicable