

Hunt FOCUS

AN ADI ENDPOINT

AirPoint Specification Sheet



Auto-configuration and Security for Remote Meter Reading

The Hunt AirPoint FOCUS endpoint combines ERT-compatible radio frequency (RF) technology, manufactured by Hunt Technologies, with the Landis+Gyr solid-state FOCUS® meter for an automatic meter reading (AMR) solution designed to be compatible with Itron's mobile collection devices, handheld collection devices and software platforms. The AirPoint™ module accesses consumption data via a direct register read from the FOCUS meter then transmits usage and demand data, providing the same basic features and functionality as the Itron R300 module.

With the introduction of the AirPoint FOCUS endpoint, Landis+Gyr and Hunt have also introduced to the market a new module self-configuration capability. The self-configuration feature allows the AirPoint module to follow programming changes made in the FOCUS metering metrics. The FOCUS meter can be programmed to use one of four metering metrics—positive, negative, net and added (security)—as the primary metric. If a programming change is made to the primary metric of the meter, the AirPoint module will automatically follow suit, using the selected primary meter metric as its own primary value. This self-configuration feature eliminates the need to reprogram module parameters and can help avoid incorrect reads if the meter is reprogrammed.

The AirPoint module uses standard consumption message (SCM) protocol for encoding radio transmissions, allowing wider system compatibility and data security. Other security features include two tamper flags in the SCM stream, power removal and power inversion, each of which can assist in the detection of theft of service.

The FOCUS meter platform

When combined with modular AMR communication technologies, such as Hunt Technologies' ERT-compatible AirPoint module, the FOCUS meter delivers benefits not typically found with other solid-state platforms. A unique single-circuit board design, with fewer connectors and fewer parts, contributes to increased reliability and better overall endpoint performance. Endpoint diagnostics may be accomplished more quickly and more accurately because the FOCUS metrology and modular AMR communications are separated. Furthermore, the meter circuit-board is mounted in the face of the meter, away from potentially damaging current coil heat that can be generated under heavy loads or other conditions.

Highly accurate load performance and the use of a field-proven Digital Multiplication Measurement Technique contribute to greater reliability and dependability during the life of the FOCUS meter. Hunt AirPoint FOCUS endpoints are available in all residential meter forms and are ideal for residential expansion of a currently installed Itron mobile meter reading system.

Solution highlights:

- Reads metrology data values directly from the meter register
- Under-cover communications
- Tamper detection
- Low cost implementation with rapid ROI
- Proven technology
- Successful load profiling and forecasting
- High meter reliability and accuracy
- Field-proven Digital Multiplication Measurement Technique
- Economical price

Technical Specifications

Meter Compatibility

FORM	CLASS	VOLTAGE
1S	100	120
2S	200	240
2SE	320	240
2K	480	240
3S	10/20	120
3S	10/20	240
4S	10/20	240
12S	200	120/208
25S	200	120/208

Functional Specifications

Tamper Detection:	Power removal, power inversion
Programming Parameter:	Primary metric and number of display digits
Meter/Module Interface:	Direct register read
FCC Compliance:	Part 15 certified
Product Identification:	Device ID
Application:	One-way, unlicensed RF

Operational Specifications

Transmit Frequency:	RF Unlicensed ISM band
Transmit Power:	Low-power mobile transmission

Environmental Specifications

Operating Temperature:	40°C to +85°C
Operational Relative Humidity:	5% to 95% (non-condensing)

Surge Withstand Specifications

- ANSI C37.90.1 - 1989 Surge Withstand Capability
- ANSI C12.20 - 2002 Electrical Fast Transient/Burst
- ANSI C12.20 - 2002 Effect of High-Voltage Line Surges