

# Commercial Industrial Metering

Landis+Gyr

Choice for Demanding Polyphase Applications

Do your commercial meters deliver the data you need while providing both flexibility and value?



With options to cover most metering challenges, Landis+Gyr's commercial and industrial meter family delivers performance and value. Both the E650 S4x and E330 FOCUS® AX Polyphase meters are designed to cover a wide range of requirements and applications – from light commercial to industrial metering – with proven reliability and unmatched features.

Landis+Gyr's polyphase meters eliminate the need to pre-program the service type. Simply install the meter, and it automatically detects the service type and voltage, displaying the information on the LCD and configuring the

GyrBox for a complete diagnostic installation check. By continually performing diagnostics on the metering installation equipment, service wiring and load characteristics, GyrBox identifies issues with equipment, installation, wiring, load conditions, power quality and tampering.

Both platforms provide an ANSI Type 2 optical port for meter programming and firmware upgrades. They utilize advanced second generation over-the-air, flashable firmware, so when supported by the AMI network, they can be upgraded remotely without losing the meter configuration or billing data.

## HIGHLIGHTS:

- Active and reactive energy measurement
- Demand, TOU and load profile
- ANSI C12.19 standard protocol
- Ease of AMI integration
- Over-the-air firmware updates
- Measurement accuracy class of 0.2%
- Robust design with unsurpassed 10kV surge handling
- Extensive event logging
- Designed for a 20+ year life

## Choice for Demanding Polyphase Applications

	The Family of Commercial Meters	
	E330 FOCUS AX Polyphase	E650 S4x
<b>Metrics</b>		
Delivered (+kWh) and received (-kWh) active energy	+	+
Delivered and received reactive energy, kVAh and kVARh	+	+
Voltage sag and swell per phase	+	+
Temperature sensing – record in LP, trigger event	+	+
Twelve self reads – all summations and demands	+	+
True four quadrant meter – all metrics in all quadrants		+
Delivered and received kW, kVA, and KVAR demands		+
Two alternate reactive and apparent energy algorithms		+
All data stored in engineering units for increased resolution		+
<b>Security and Tamper Detection</b>		
Optical port lockout – via AMI system	+	+
Cover removal switch – detects physical tamper		+
Tilt and vibration sensor – detects excessive force		+
Leading PF detection – senses potential DC presence	+	+
Magnetic tamper detection – via hall effect sensor		+
<b>Hardware Options</b>		
Gridstream® RF communication module	+	+
True three-phase power supply		+
Input/output (I/O) board for external sense, KYZ and load control		+
Support 480V line to neutral		+
<b>Load Profile</b>		
Channels	8	16
Standard memory	77 K	256 K
Increased memory (optional)		1 MB
Second recorder – different interval structure (optional)		16 Channels
Data resolution	16 Bit	32 Bit

### E330 FOCUS AX Polyphase

#### Proven Platform

The AX Polyphase brings the same proven, solid-state performance utilities have come to expect from the FOCUS family in an AMI-ready platform for light commercial applications.

#### AMI Communications

Like all other FOCUS AX meters, the AX Polyphase supports multiple modular AMI solutions. Along with Gridstream RF, solutions are available from four other communications providers spanning RF mesh, cellular and power line carrier technologies.

#### Cost Effective

The FOCUS AX Polyphase is perfectly positioned alongside the full-featured S4x

platform. The FOCUS AX Polyphase provides a cost effective alternative for light commercial metering applications not requiring the same level of functionality as the S4x.

### E650 S4x

#### Metrics and Load Profile

The E650 S4x provides an extensive array of energy and demand metrics. With more data available, customers can utilize more load profile capability. Standard load profile memory of 256 KB is upgradable to 1 MB without adding metrology hardware. An optional second recorder provides dual structure load profile. Load profile can be configured for up to 16 channels (32 with dual structure) of information from a choice of over 70 different storage metrics.

#### Tamper Detection

The E650 S4x raises the bar on security features and tamper detection. Tilt and vibration sensing, magnetic field detection, and a cover removal switch are innovative new capabilities designed to reinforce revenue protection efforts.

#### Input/Output

An optional I/O board provides up to four solid-state relay outputs and up to two external inputs for recording pulses from remote sources. These relays can be programmed for end-of-interval, power factor alert, diagnostic alert, voltage alert, demand threshold alert, KYZ or load control. The I/O board can be used in conjunction with a Gridstream RF module for ultimate flexibility.