



2018 CATALOG



SEL-735

POWER QUALITY AND REVENUE METER

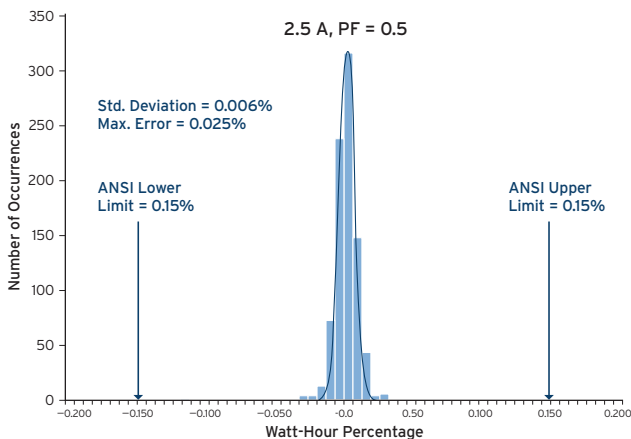
Starting Price

1,500 USD



FOR COMPLETE INFORMATION, VISIT SELINC.COM/SEL-735

Ensure Accurate Revenue Metering—Exceed ANSI C12.20-2015 Class 0.1 and IEC 62053-22 0.2 accuracy class requirements over a wide current range, with bidirectional, full four-quadrant energy metering for generation, interchange, transmission, distribution, or industrial applications. Many new metering installations, such as distributed generation, operate over a wide current range.



Accuracy-test results of approximately 1,000 SEL-735 Meters report a maximum error of 0.025 percent, outperforming ANSI 0.1 and IEC 0.2 accuracy class requirements.

Compensate for Errors in Instrument Transformers—Increase metering accuracy by compensating for instrument transformer errors. The SEL-735 Power Quality and Revenue Meter interpolates six user-defined calibration points and corrects ratio and phase errors over the entire measurement range. Decrease replacement and maintenance costs by compensating for each instrument transformer individually.

With the powerful combination of instrument transformer compensation and IEEE C37.118 synchrophasors, you can choose to correct delays and errors on each phase to achieve greater system accuracy.

Measure and Report Reliable Power Quality (PQ) Indicators—Ensure precise and reliable measurements with full IEC 61000-4-30 Class A PQ compliance. Size feeders appropriately, safeguard equipment, and plan upgrades using PQ indicators for predictive maintenance. The SEL-735 measures harmonics, interharmonics, flicker, power factor, voltage disturbances, K-factor, and other key PQ indicators.

Other popular applications include troubleshooting voltage disturbances, monitoring photovoltaic (PV) inverter interconnections, and monitoring sine wave purity for critical industrial facilities. The SEL-735 Meter allows you to quickly identify any PQ problems before equipment damage or misoperation occurs.

Log Load Profile Data—Collect billing data with a simple-to-use load profile recorder that captures years of data. Independent load profile recorders in the SEL-735 allow simultaneous meter and PQ logging of hundreds of data channels. Trend averages, minimums, maximums, changes, and snapshots at a rate as often as every three seconds.

Capture Waveforms and Trigger Records—Record thousands of waveform captures and events associated with programmable trigger conditions, such as a voltage interruption. Enabled from the factory, the voltage sag, swell, and interruption (VSSI) recorder time-stamps voltage excursions with up to 1 ms resolution and records indefinitely using an adaptive sampling rate. Settings include trigger thresholds from ± 3 percent to ± 100 percent of the actual value and automatic recording duration dependent on the length of the voltage excursion.

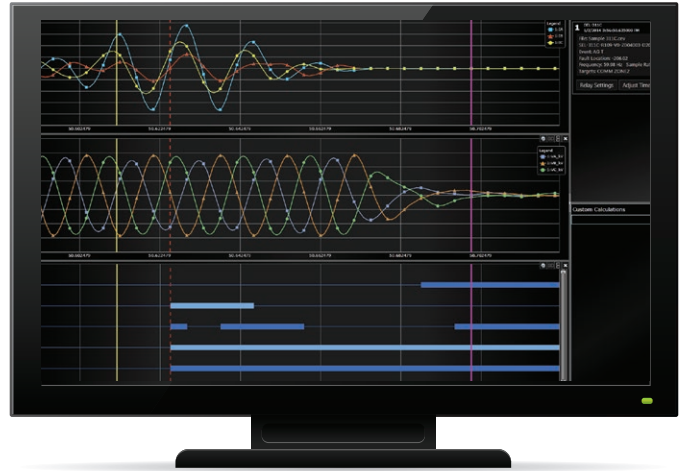
RECORDING CAPABILITIES

Store disturbance data in the meter for several years, and retrieve them for analysis.

The following quantities can be recorded:

- VSSI with IT1 (CBEMA) reports
- Symmetrical components
- Measurement aggregation in 3-second,* 10-minute,* and 2-hour* intervals
- Harmonic angles for voltage and current, up to the 63rd* harmonic
- High-resolution, 512 samples/cycle* waveform capture
- High-speed load profile recording with 10-/12-cycle resolution*

*Optional

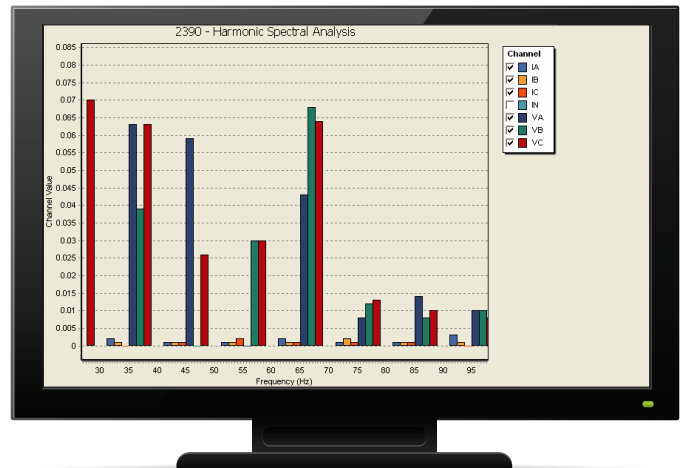


View event records and waveform captures of system anomalies.

PQ STANDARDS COMPLIANCE

Ensure reliable, compliant measurements from all devices connected to the same metering points.

- Measure current, voltage, power, energy, and unbalance data in accordance with IEC 61000-4-30 Class A.
- Measure harmonics and harmonic groups in accordance with IEC 61000-4-7:2010.
- Monitor individual harmonic values, interharmonics from 5 to 3,800 Hz in 5 Hz bins, total harmonic distortion (THD), crest factor, and K-factor.
- Assess short- and long-term flicker values in accordance with IEC 61000-4-15:2010.



VIEW WAVEFORMS IN REAL-TIME

Designed to emulate an oscilloscope, Wave View provides up to ten cycles of real-time waveform capture at 512 samples/cycle. This enables you to view instantaneous voltage and current, which can simplify troubleshooting and reduce the time required for analyzing high-frequency harmonic distortion.



Waveform capture from Wave View, available in the acSELErATOR QuickSet® SEL-5030 Software HMI.

SEL-735 OVERVIEW



Customizable three-line or single-line display

Customizable scaling and formatting

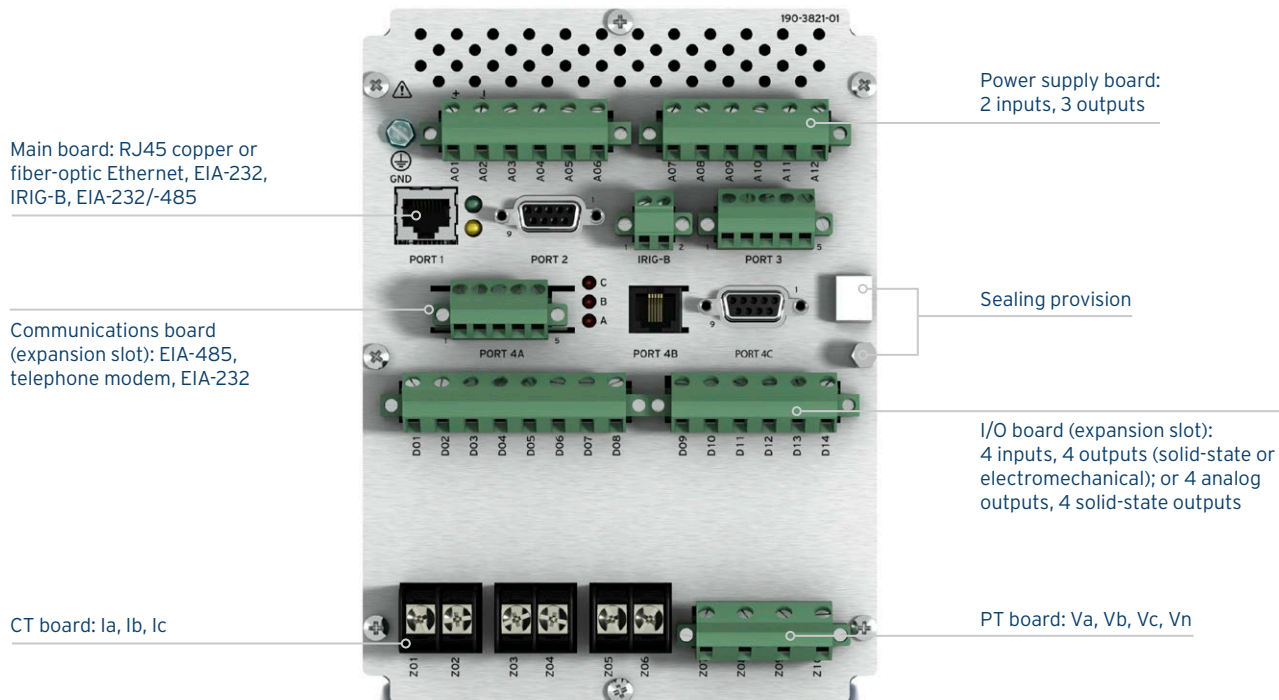
Simple front-panel navigation

Customizable local controls

Six programmable LEDs

ANSI Type II optical port or EIA-232 port

Custom nameplate and barcode



Main board: RJ45 copper or fiber-optic Ethernet, EIA-232, IRIG-B, EIA-232/485

Power supply board: 2 inputs, 3 outputs

Communications board (expansion slot): EIA-485, telephone modem, EIA-232

Sealing provision

CT board: Ia, Ib, Ic

I/O board (expansion slot): 4 inputs, 4 outputs (solid-state or electromechanical); or 4 analog outputs, 4 solid-state outputs

PT board: Va, Vb, Vc, Vn

Outdoor Enclosure

- Replace socket meters with a low-cost enclosure and prewired FT-1 test switch.
- Quickly add the meter to your system with the support of thoughtful design details, such as DIN rails for accessories; a lockable, stainless-steel latching system; wall-mount brackets; and wire clamps. The fully sealed enclosure complies with NEMA 4X, IEC 529, and IP66 protection requirements.

Easily Extractable Meter (EXM)

- Extract an SEL-735 Meter in less than one minute using the EXM option. A self-shorting CT connector automatically shorts CT secondaries when disconnected.
- Replace draw-out meters with simple retrofit brackets that match the existing panel cutout for legacy meters.

Portable Power Quality Meter

- Monitor PQ anywhere with the SEL-735 Portable Power Quality Meter.
- Install a temporary meter anywhere with a PQ meter in a rugged portable case.
- Pinpoint PQ problems and energy consumption on subcircuits with clamp-on current transformers and clip-on voltage leads.
- Log years' worth of data with onboard memory.



Outdoor Enclosure Mounting



Portable Power Quality Meter



Easily Extractable Meter



Retrofit Mounting Bezels