Lumin® Smart Panel

Lumin
Control What Matters

Universally compatible and retrofit ready, the Lumin Smart Panel seamlessly integrates into existing electrical setups, making standard circuits smart and responsive. Whether you're optimizing a solar + storage system, adding a generator or expanding your electrical capacity to accommodate high demand electric loads like heat pumps and EV chargers, it unlocks both insight and control into connected circuits. Now that's smart.

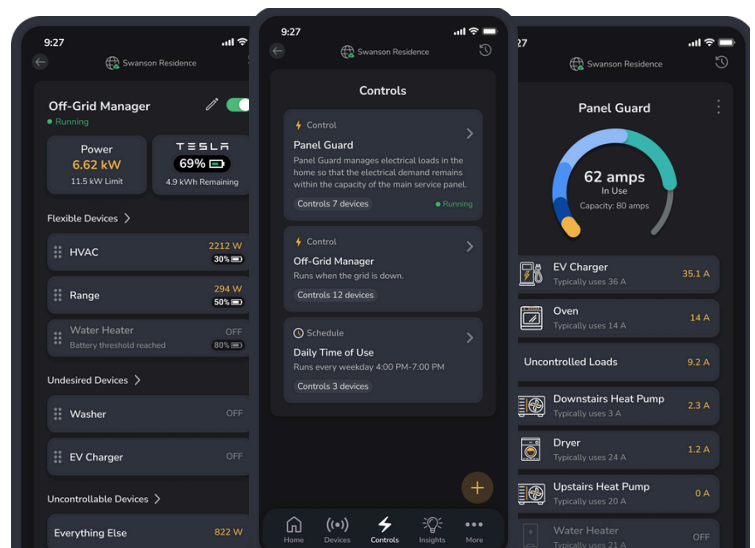Compatible with any battery, inverter or service panel.

Up to 12 circuits of control.

Connects to existing service panel for turnkey setup.

Designed, engineered and assembled in Virginia.

Download the Lumin Energy App

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Lumin Smart Panel Technical Specifications - Outdoor

Installation

Type	Surface-mount; indoor or outdoor
Installer Qualification	Local electrical codes and Lumin Certified Installer
Typical Time Required	1.5-4 hours
NEMA Rating	Type 3R
Temperature	-30°C to 70°C (-22°F to 158°F)
Humidity	< 100% RH
Altitude	< 3000 m
Dimensions	55.8 cm × 48.3 cm × 14.0 cm (22 in × 19 in × 5.5 in)
Weight	12 kg (27 lb)
Conductor Length	All extend 100 cm (40 in) beyond conduit end

Electrical System

AC Voltage	120/240 VAC split-phase, 50–60Hz
Supply Breaker Rating	15–20 A (non-GFCI)

Connectivity and Security

Connection Options	Wi-Fi or Ethernet
Internet Bandwidth	Approx. 0.02 Mbps
Wi-Fi Protocols	802.11 b/g/n, 2.4 GHz
Wi-Fi Encryption	WPA and WPA2 methods
Ethernet Port	1×RJ-45 (10/100/1000 Mbps)
IP Addressing	Dynamic (DHCP)
Cryptographic System	TLS 1.2 (minimum)
Firewall Outbound Access Required	Ports 53, 123, 443–444, and 50050–50059

Managed Loads

Max. Load Breaker Ratings Up to 50 °C	60 A per line × 6 lines and 30 A per line × 6 lines
Load Breaker Ratings at 50-60 °C	50 A per line × 6 lines and 20 A per line × 6 lines
Breaker Types	Single pole (1 line) and dual pole (2 lines)

Measurement

Accuracy	±0.5% of load
Monitoring Type	Separate measurement of lines (including dual-pole)
Split-Phase Voltage	Separate line-to-neutral potential measurement
Current Transformers	2 split-core 200 A included; up to 2 additional available

Support and Compliance

Warranty	10-year limited
Compatible Equipment	All makes/models/brands of electrical panels and breakers.
Safety Compliance	UL 916; UL and CSA C22.2: 61010-1 & 61010-2-030; MET listing E115439
Radiofrequency Compliance	47 CFR 15 (FCC) RSS-gen and RSP-100 (ISED)
State of Charge Integrations	Tesla, SolarEdge, Enphase and EG4 batteries

User Access

Local Network	Live data and controls
Appliances	iOS, Android, and web
Data	1-Second granularity (averaged from 16 kHz)
Load Controls	Manually/directly, automated schedules, and automated modes