



Up to 12 circuits of on- and off-grid control

Connect to existing service panel for turnkey setup

Compatible with any battery, inverter or service panel



Lumin® is the industry pioneer of responsive load control and smart circuit technology. The universally compatible, retrofit-ready Lumin Smart Panel seamlessly integrates into existing electrical setups, making standard circuits smart and responsive. It allows homeowners to extend battery backup, monitor energy consumption and schedule circuit control based on grid outages, electricity rates, battery capacity and more. Discover the capabilities of the Lumin Smart Panel at www.LuminSmart.com.



Download the Lumin App



Lumin Smart Panel

Technical Specifications - Indoor



Installation

Type	Wall-mount; indoor only
Installer Qualification	Local electrical codes and Lumin Certified Installer
Typical Time Required	1.5–4 hours
Temperature	0°C to 60°C (32°F to 140°F)
Humidity	< 80% RH (Non-condensing)
Altitude	< 3000 m
Dimensions	44.6 cm × 44.6 cm × 10.1 cm (17.5 in × 17.5 in × 4.0 in)
Weight	12 kg (27 lb)
Conductor Length	All extend 76 cm (30 in) beyond conduit end
Additional Units	Use of multiple Lumin Smart Panels supported

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	1xRJ-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 & Compliance

Warranty	10-year limited
Compatible Equipment	All makes/models/brands of electrical panels and breakers
Safety Compliance	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)
Integrations	Tesla, SolarEdge, Enphase, EG4 and FranklinWH batteries

User Access

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

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
Additional Units	Use of multiple Lumin Smart Panels supported

Electrical System

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

Connectivity & 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 & Compliance

Warranty	10-year limited
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