



DATASHEET

# ABB ReliaHome™ Smart Panel

## ABBHEM1 Technical Specifications

Installation	
Type	Wall-Mount; Indoor Only
Installer Qualification	Local Electrical Codes and 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 ABB 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
Supply Amperage	0.4A (Maximum)
Standby Power	6W
Voltage Fluctuations	+ - 10% from Nominal
TPU (optional)	Load shedding supports toggling all lines a minimum of once during a power outage

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
Measurement Category	Loads: CAT III (Mains Distr.) GDC: CAT IV (Mains Source)

Support & Compliance	
Warranty	10-Year Limited
Compatible Equipment	All Makes/Models/Brands of Electrical Panels and Breakers
Safety Compliance	Listed to UL and CSA C22.2: 61010-1 & 61010-2-030 47 CFR 15 (FCC) RSS-Gen and RSP-100 (ISED)
Radiofrequency Compliance	MET Listing E115439

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

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