SolarEdge Home Network

Wireless Mesh Network



COMMUNICATION

One communication platform for seamless device connection within the SolarEdge Smart Energy Management ecosystem

- Faster, easier, and cleaner installations*
 - Avoids the hassle of wired infrastructure with wireless connectivity between inverter and system devices
 - Simple plug and play connection
 - Automatic device detection and configuration using SetApp
- Field-proven wireless technology
 - Mesh network topology enabling long-range transmissions
 - Robust performance in challenging environments

- Connectivity you can count on
 - Reliable communications with no single point of failure (for multiple device systems)
 - Secured telemetry with advanced device authentication and data encryption
- External antenna to ensure maximum coverage



^{*} When compared to SolarEdge installations using wired communications

/ SolarEdge Home Network Plugin

PART NUMBER		ENET-xBNP-01	ENET-xBCL-01	ENET-HBPV3D-01	UNIT
PERFORMANCE					
Transmission Power (max	()		17 ⁽¹⁾		dBm
Receiver Sensitivity		-100			dBm
Indoor Range (no line of sight)		50 / 160			m/ft
ENVIRONMENTAL	•				
Operating Temperature		-40 to 185 / -40 to +85			°C / °F
Storage Temperature		-40 to 185 / -40 to +85			°C / °F
MECHANICAL			·		
Size		0.98 x 1.37 / 25 x 35	1.29 x 2.99 / 33 x 76	0.98 x 1.37 / 25 x 35	in / mm
POWER SUPPLY		0.30 x 1.37 / 23 x 33	1.23 x 2.33 / 33 x 10	0.30 x 1.37 / 23 x 33	117 11111
			2.2		1/1
DC Voltage (nominal)		3.3			Vdc
Max Input Current			200		mA
COMMUNICATION					
Supported Communication Protocol Operating Frequency Range		SolarEdge Home Network 916 – 924 (AUS) 915 – 928 (Brazil) 863 – 870 (EU) 920 – 925 (Taiwan)			MHz
		902 – 928 (US)			
Modulation		O-QPSK (Quadrature Phase Shift Keying)			
EIRP with Antenna		20 (AUS) 19 (Brazil) 14 (EU) 27 (Taiwan) 20 (US)			dBm
ANTENNA ⁽²⁾			20 (03)		
Antenna Type			Outdoor		
Antenna Connector			RP-SMA		
VSWR		≤4.0			dBi
Polarization		Vertical			
Material		PC Lexan 503R-WH5151L or WH8G952 Sabic			
Dimensions (Length x Diameter)		7.87 x 0.78 / 200 x 20			mm / in
COMPLIANCE					
Acceptable	EMC / EMI	CISPR 32 AS/NZS CISPR 32, AS/NZS 4268			
Australia	Radio	AS/NZS 4268			
Brazil	Radio	Resolução N° 680 e Ato Nº 14448/2017			
Canada EMC / EMI		ICES-003			
Cariada	Radio	RSS-247 for SRD, RSS-102 MPE report			
Europe	EMC / EMI	CISPR 32, EN 55032, EN 55035, EN 301 489-1, EN 301 489-3			
- > k =	Radio	EN 62311 (EMF test), EN 300-220-1, EN 300-220-2			
Japan	EMC / EMI	VCCI-CISPR 32			
<u> </u>	Radio	ARIB STD-T93, JAPAN EXTREMELY LOW POWER		/ POWER	
Korea Taiwan	EMC / EMI and Radio	Korea RF (KN 32/35) NCC LP0002			
Taiwan US	EMC / EMI and Radio EMC / EMI and Radio	FCC Part 15B, FCC Part 15C			
	LIVIC / EIVII ATIU RAUIO		I CC FAIL IDD, FCC PAIL IDC		
COMPATIBILITY				10.11	
		SolarEdge Home Network-ready inverter with the following part number format: SEBExx SEBXxx SEBXxx For example: SE7K-AUBTEBEU4	SetApp-enabled inverter Note: Plugs into the cellular socket. Cellular plug-in or ZigBee plug-in cannotbe installed in parallel	SetApp-enabled LCD inverter Requires replacement communication board with LCD	

⁽¹⁾ Transmission power may be higher according to each country's standard requirements. (2) External antenna is provided with the SolarEdge Home Network Plug-In kit.





⁽³⁾ For details about selecting the appropriate SolarEdge Home Network Plug-in kit for your inverter, see the SolarEdge Home Network Plug-in Kit Selection technical note.