RADWIN Smart-Node

Smart-Node with input power of 100-240 VAC, standard battery

RW-8019-1100

Product Description

RADWIN Smart-Node is an outdoor communications and power solution that reduces costs and accelerates the roll-out of smart-city, IoT and telecom projects. The all-in-one Smart-Node solution offers a wide variety of power and networking interfaces including fiber and an array of radio technologies to connect multiple devices such as CCTV cameras, Wi-Fi access points and IoT sensors.

Bridging the gap between broadband and IoT applications, Smart-Node enables easy integration with 3rd party devices to support multiple applications ranging from city surveillance, smart-lighting, waste management, smart-metering and more.

Smart-Node is a remarkably compact, IP-67 protection grade solution that guarantees low visual impact for street level deployments and high reliability when exposed to extreme temperatures and tough environments.

Product Highlights

- 240W Power supply (100-240V AC input)
- Managed switch: 5 Gigabit PoE ports (802.3 af/at, at+(60W) and Passive PoE 24V/56V)
- Fiber/copper combo port (SFP/RJ-45)
- Communications and power management
- UPS (Lithium-ion battery)
- DC output for external devices (12V/24V)
- Alarms IN/OUT (Dry contacts)
- Internal interfaces for 3rd party devices integration (Cellular, Wi-Fi, IoT gateways, etc.)
- Weather proof enclosure – IP67

RADWIN

Product Specifications:

Power	
Power Supply	240W (100-240V AC input, 50/60Hz 3.5A)
UPS Backup	- 2.5A/h Lithium-ion battery (120W/h at full load) - Charging temperature 0°C to 30°C/ 35°F to 86°F (for extended range, please contact RADWIN) - Discharging temperature -10°C to 45°C / 14°F to 113°F (at full load) - 500 charging cycles at 20°C / 68°F (may vary according to environment conditions)
Power Protections	- Over/under voltage - Short circuit - Battery low voltage disconnect - Battery over charge - 10kV/5kA and IEEE C62.41.2 max power surge protection - Discharge current, 8/20µs 10kA max Ethernet surge protection
Ports	
PoE1	- RJ-45 - Ethernet - 802.3 af/at/at+(60W)or 56V Passive PoE
PoE2	- RJ-45 - Ethernet - 802.3 af/at/at+(60W)or 56V Passive PoE
PoE3	- RJ-45 - Ethernet - 802.3 af/at(56V-15/30W) or 24V passive PoE
PoE4	- RJ-45 - Ethernet - 802.3 af/at(56V-15/30W) or 24V passive PoE
PoE5 (combo port with SFP)	- RJ-45 - Ethernet - 802.3 af/at/at+(60W)or 56V Passive PoE
SFP (combo port with PoE5)	SFP, Fiber
DC	12/24V output power
ALM-IN	2 dry contacts - input (triggered by short circuit)
ALM-OUT	2 dry contacts - output (up to 60VDC, up to 1A load)
ANT	N-Type antenna port for 3rd party equipment
Networking	
Switch Configuration	- IEEE 802.3: 10BASE-T, IEEE 802.3u: 100BASE-T, IEEE 802.3ab: 1000BASE-T - VLAN (Transparent/Aware, Port VLAN mode: Access/Trunk, port VLAN ID) - SNTP, NTP client - MAC Addresses: 1k - SNMP polling of traffic, including read / write - Report traffic per second, per port - Watchdog on IP (ping), reset port if not responding
Management and Configuration	
Interface	Web Management interface, SNMP V1
Configuration	- Switch PoE port On/Off - Graceful power degradation by priority - DC-OUT port power configuration (12V/ 24V) - Trap destinations - Alarms In/Out management
Monitoring	- Ports status: connected ports, PoE on/off, power consumption, voltage (56V, 24V), priority, VLAN and traffic - Power management information: power source, lithium battery status, battery time remaining, supplied current and voltage and temperature - Events - Tamper sensor (trap)
Management and maintenance	- Remote monitoring and management - SW update - Backup and Restore - Factory default - Hard reset - Power source status LED - Remote reset of PoE ports
Internal Interfaces for 3rd Party Devices Integration	
Power and communication interfaces available for 3rd party devices	- RJ-45, Ethernet - 802.3 af/at or 24V passive PoE - 12V/15W output power
Internal Space for 3rd party Equipment	47(h)x116(w)x160(d)mm
Maximum power consumption for 3rd party Equipment	15W (under full Smart-Node power consumption load)
Antenna Port	N-Type antenna port (SMA internal interface)
IoT Port	General purpose port

RADWIN

Mechanical	
Dimensions	379(h) x 309(w) x 115(d) mm
Weight	7.4 Kg
Installation types	Pole mount, Wall mount
Environmental	
Operating Temperatures	-40° to 60°C / -40° to 140°F (Backup UPS operating temperature is –10°C to 45°C / 14°F to 113°F)
Degrees of Protection	EN/IEC 60529, IP67
Safety	
US/CAN (cTUVus)	UL 60950-1, UL 60950-22, CAN/CSA C22.2 60950-1, CAN/CSA C22.2 60950-22
CE/IEC	EN/IEC 60950-1, EN/IEC 60950-22
EMC	
FCC	47 CFR Part15, Subpart B, Class B
CE	EN 301 489-1, EN 301 489-4, EN 301 489-17, EN 300 386
CAN/CSA-CEI/IEC	CISPR 32:2015, Class B
AS/NZS	CISPR 32:2015, Class B

Ordering Info
Part Number: RW-8019-1100
Description: Smart-Node with input power of 100-240 VAC, standard battery.

This data sheet shall be used only for information purpose.
The products and specifications described herein are subject to availability and may change without prior notice.

Corporate Headquarters, T. +972.3.766.2900, E. sales@radwin.com, www.radwin.com

DS RW-8019-1100/10.19