RADWIN Smart-Node

Smart-Node with input power of 40-57 VDC

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

- External DC input 40-57VDC (Solar, Street light or battery power system)
- 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
- 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

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Product Specifications:

Power	
Power Supply	External DC Input 40-57VDC, up to 240W (to enable PoE power output DC input should be > 44V)
Power Protections	- Over/under voltage - Short circuit - Reverse polarity - 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, 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
Mechanical	
Dimensions	379(h) x 309(w) x 115(d) mm
Weight	5.6 Kg
Installation types	Pole mount, Wall mount

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Environmental	
Operating Temperatures	-40° to 60°C / -40° to 140°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-8019-3200
Description: Smart-Node with Input power of 40-57 VDC.

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.

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