



- Cisco IOS® 5921 ESR
- Ruggedized IP65 Enclosure
- Modular Cellular Connectivity
- High Transmit Power Wi-Fi
- Multiple Interfaces
- Long-term Availability

Features

Cisco IOS - Features the Cisco 5921 Embedded Services Router (ESR), the IOS Software router that provides reliable network routing in extreme environments

Rugged - IP65-rated and extended operating temperature for premium performance in extreme environments

Modular Cellular Connectivity - ReliaCELL 10-20 Cellular Adapter Module provides multiple 4G/3G connectivity options for flexibility in multi-carrier and multinational deployments

High Power Wi-Fi - High transmit power dual band Wi-Fi for localized connectivity on-board and in the vehicle vicinity

Multiple Interfaces - Multiple Ethernet, serial I/O ports, optional CAN bus, plus embedded GPS for complete vehicular connectivity

Long-term Availability - Designed for markets and applications where long-term availability and support is a must have requirement

Description

The BoltMAR 20-11 provides a mission-critical connectivity solution with flexible wireless networking support and Cisco 5921 Embedded Services Router (ESR) for mobile wireless infrastructures, supporting ubiquitous Cisco internetworking for industrial, transportation, public safety, and defense applications.

The routing functionality allows enterprise-grade networking, multi-path routing, quality of service, security, and management to be extended to mobile assets, enabling self-forming and self-healing networks for remote sensor management, vehicle-to-vehicle and on-board communications, high-speed networking, and surveillance.

The BoltMAR 20-11 provides dual Ethernet (expandable), 802.11 a/b/g/n Wi-Fi, serial and USB ports, optional built-in GPS and CAN bus ports and a wide range power supply to support the most demanding vehicular requirements.

Cellular connectivity for BoltMAR 20-11 features Eurotech ReliaCELL 10-20 Modular Cellular Adapter, supporting a wide variety of cellular technologies including the latest LTE UE categories and is certified for multiple carriers and markets.

A ruggedized platform ideal for harsh vehicular environments, the BoltMAR 20-11 provides a low power, fanless, and compact design with high-end rugged connectors, IP65 ingress protection, and extended operating temperatures to ensure long-term reliability.

Ordering code: BTMAR-20-11-01

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|-------------------------|------------------------|---|
| ROUTING | Software Router | Cisco 5921 Embedded Services Router (ESR) |
| | Routing Protocols | RIP Versions 1 and 2, OSPF, EIGRP-IP, BGP, Cisco Discovery Protocol, IP Policy Routing, IP Multicast PIM Versions 1 and 2, IGMP Versions 1, 2, and 3. GMP |
| | VLANs | Up to 32 VLANs per Router |
| | Radio-Aware Routing | Radio-Aware Routing: optimizes IP routing over fixed or temporary radio networks, Factors radio link metrics into route calculations; Immediately recognizes and adapts to changes in network neighbor status Dynamic Link Exchange Protocol (DLEP), Router Radio Control Protocol (R2CP), RFC 5578 |
| | Security | Cisco Suite B Support; PAP/CHAP Authentication; IPSec, SSL/TLS, 3DES, AES, IKE Protocol Support |
| | QoS | QoS, Traffic Shaping, Priority Queuing, RSVP |
| | Management | SNMP, RADIUS, TACACS+, NTP, TFTP, DHCP Client and Server, DHCP Relay, NAT/Multi-NAT |
| | Mobile Ad-Hoc Networks | Mobile IP - OSPFv3 Enhancements for Mobile ad-hoc Networks |
| PROCESSOR | CPU | Intel Atom Z510P, 1.1GHz |
| MEMORY | RAM | 1GB RAM Soldered on Board |
| STORAGE | SSD | 2GB Flash Disk SSD, 8GB DOM |
| | Other | 1x microSD Slot (Service Panel) |
| I/O INTERFACES | Ethernet | 2x 10/100/1000Mbps (Expandable) |
| | USB | 2x USB 2.0 (Service Panel), 1x USB 2.0 (Rear Panel M2 Connector) |
| | Serial | 1x RS-232 (Service Panel), 2x RS-232 (Rear Panel M2 Connector) |
| | CAN 2.0B | Factory Option |
| | Digital I/O | 2x Opto-isolated Digital Input, 1x Opto-isolated Digital Input Odometer |
| | Video | 1x VGA (Service Panel) |
| RADIO INTERFACES | Cellular | Optional Accessory: ReliaCELL 10-20 2G/3G/4G Modular Cellular Adapter, with Cable Harness |
| | GPS | Factory Option: 50 channels Galileo |
| | Wi-Fi | Dual Band 2.4/5.0GHz IEEE 802.11 a/b/g/n - High TX Output Power up to 25dBm @ a/g/n Bands |
| | Antennas (External) | 1x SMA GPS, 2x SMA Wi-Fi, 1x Reserved |
| OTHER | LEDs | 4x Green LEDs |
| | Buttons | 1x Reset |
| POWER | Input | 9 - 36VDC (Nominal 24VDC), Ignition Key Input |
| | Consumption | 19W Typical |
| ENVIRONMENT | Operating Temp | - 30 to +60°C EN50155 Class T1 (70°C for 10 min) |
| | Storage Temp | - 40 to +85°C |
| | Humidity | < 95% Relative Humidity at +45°C Non Condensing |
| CERTIFICATIONS | Regulatory | CE, FCC, ISED |
| | Safety | UL 60950-1 (S) |
| | Vertical | EN 50155, EN 45545 (Fire & Smoke), EN 61373 (Vibrations & Shocks) |
| | Environmental | RoHS2, REACH |
| | Wi-Fi Radio | RED, FCC |
| | Ingress | IP65 |
| MECHANICAL | Enclosure | Extruded Aluminum (Black Anodize) |
| | Dimensions | 254x129x57mm / 10.0x5.08x2.24in (LxWxH) |
| | Cooling | Fanless Design (No Moving Parts) |
| | Weight | 3Kg |

(S) UL, NRTL listing Factory Option.

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