

Indura™ R1 Mobile Router

Rugged Cisco® 5921 Routers for
Mission Critical Connectivity



- Cisco IOS® 5921 Embedded Services Router (ESR)
- Secure collaborative communications with Group Encrypted Transport VPN, or FlexVPN
- Designed for high reliability in extreme environments
- Modular and customizable to meet program-specific requirements
- Commercial off-the-shelf (COTS) technology for cost-effective flexibility

The Dynatem Indura™ family is a modular and scalable line of IP networking products for use in mobile and edge applications. The rugged and compact Indura family leverages commercial-off-the-shelf (COTS) technology to deliver data center performance, security and features in applications that are size, weight and power (SWaP) constrained — enabling the integration of highly secure and reliable network centric C4ISR systems in mobile manned/unmanned land, sea or air platforms.

The Indura R1 Mobile Router provides highly secure data, voice, and video communications to stationary and mobile network nodes across wired and wireless links, providing mission-critical connectivity and flexible wireless networking support for airborne, ground and shipboard applications. The R1 incorporates the Cisco 5921 Embedded Services Router (ESR) into a rugged platform that is the ideal building block for reliable on-demand mobile wireless network communications.

Installed on a mobile platform, the R1 routing functionality allows enterprise-grade networking, multi-path routing, quality of service, security and management to be extended to mobile assets. This enables self-forming and self-healing networks for remote sensor management, vehicle to vehicle and on-board communications, mobile asset control and communication, high-speed networking and surveillance.

A ruggedized platform ideal for harsh mobile environments, the R1 provides a low power, fanless, and compact design with rugged connectors, IP66 ingress protection, and extended operating temperatures to ensure long-term reliability.

The R1 offers a variety of modular I/O, Wi-Fi and cellular connectivity options and is also customizable to meet user-specific application requirements.

Indura™ R1 Mobile Router

System Specifications	
Processor	Atom E3845, 1.91GHz, Quad Core
Memory	4GB 1333MHz (DDR3L-ECC)
Storage	8GB eMMC One (1) microSD Slot (User Accessible)
NVMe I/O Interfaces	Two (2) 10/100/1000Mbps Ethernet (Expandable) Two (2) USB 2.0 Noise and Surge Protected, One (1) USB 2.0 (Service Panel) Serial: One (1) RS-232/RS-422/RS-485 (9 Wires) Isolated, TTL Console (Service Panel) One (1) CAN bus 100mA with 5V Power Out, Isolated Four (4) Digital Input/ Digital Output, One (1) Odometer, One (1) Ignition Key (All Isolated) One (1) Micro HDMI (Service Panel)
Radio Interfaces	GPS: GPS/QZSS/GLONASS/BeiDou/Galileo with Dead Reckoning Cellular: One (1) LTE Cat 4 Modem Wi-Fi/BT: 802.11b/g/n, 4.0 BLE External Antenna Ports: 2 SMA Cellular, 2 RP-SMA Wi-Fi/Bluetooth, 1 SMA GPS
Other	TPM: Available Option Sensors: Accelerometer, Temperature LEDs: One (1) Power, Three (3) MiniPCle Slot, Two (2) Programmable (Dual Color Green/Amber) Buttons: One (1) Reset, One (1) Programmable (Service Panel) SIM Slot: Two (2) Single SIM, Switchable for Bandwidth Aggregation and Carrier/Cellular Backup (Service Panel)
Power	Input: Wide Input Range (9V - 137.5V) Consumption: 30W Max
Environmental	Operating Temp: - 40 to +70°C Storage Temp: -40 to +85°C Humidity: < 95% Relative Humidity at +45°C Non Condensing Ingress: IP-66
Mechanical	Fanless Design. No Moving Parts Extruded Aluminum (Black Anodize) Dimensions: 268 x 141 x 85mm / 10.5 x 5.5 x 3.3in (L x W x H), with Connectors Weight: ~3Kg /6.5lbs

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Since 1981, Dynatem has been a trusted supplier of rugged and secure mission-critical solutions for defense and aerospace applications. We are proven experts in designing and building rugged, small form factor technology products for use in harsh environments. Dynatem solutions can be found in mission-critical defense systems around the world—powering airborne, ground and shipboard deployments.