

NetSys-5310 RUGGED CISCO ESR-6300 ROUTER

FIREWALL, COMPACT MOBILE AND IP ROUTER

DESCRIPTION

The rugged design of the NetSys-5310 brings Cisco's ESR-6300 Embedded Services Router and its Cisco-certified mobile IP routing protocols to the network edge or wherever you need it, in a SWaP optimized chassis. The ESR-6300 delivers IP based data, voice and video to mobile users in a range of mission-critical applications with the fast and secure network performance that only Cisco can provide.



Functional Features

- Cisco IOS XE is highly programmable, with open and standards-based APIs and next-generation, multilayer security built-in
- ARM Quad-Core A72 CPU, 1200MHz
- 4GB DDR4 memory capacity (32-bit + 4-bit ECC)
- 4GB usable (pSLC mode) eMMC flash
- Anti-counterfeit chip and Secure Boot
- Hardware ready to support SD-WAN, in the near future you will be able to leverage IT expertise to a distributed network, and operate at scale
- Hardened for extreme temperatures, shock and vibration to achieve the highest standard of reliability
- 2 WAN and 4 LAN ports of Gigabit Ethernet. As your needs evolve, add mSATA storage for IOx edge compute
- Temperature Sensor
- Power Consumption and Voltage Monitoring
- IPSec

Benefits

- Enterprise-grade Cisco IOS XE routing and switching security features help ensure highly secure voice, video, and data communication
- Third-party systems integrator has the option to add an mSATA that Cisco has specified to enhance Cisco IOx edge compute capabilities
- Onboard Trust Anchor module (TAm), along with image signing, Secure Boot, and runtime defenses, helps ensure that the code running on the ESR-6300 hardware platform is authentic, unmodified, and operating as intended.
- The onboard hardware encryption module offloads packet encryption and decryption from the routing engine to increase router performance
- The Cisco ESR-6300 provides 2 routed and 4 switched highspeed Gigabit Ethernet interfaces, enabling the router to serve as an aggregation point for on-demand network connectivity in mobile or fixed deployments
- Cisco IOS software familiarity minimizes training expense

APPLICATIONS

The NetSys-5310 brings Cisco Mobile Ready Net capabilities to mobile and fixed IP based network routing capability deployed in harsh environments encountered in drilling and mining operations, commercial air and ground transport infrastructure, energy distribution, mobile ground, ship board and air defense equipment, homeland security and emergency services.

RELATED PRODUCTS

- › Complete line of small form factor chassis systems for a wide range of applications and environments
- › Standards-based I/O cards for connectivity configuration
- › Storage solutions to meet most usage requirements across a range of applications.



NetSys-5311

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SPECIFICATIONS**Environmental****MIL-STD-704F**

Input transient protection in normal and abnormal operating mode (MIL-HDBK-704-8 : LDC102, LDC103, LDC104, LDC105, LDC301)

Emergency operation (MIL-HDBK-704-8 : LDC401)

Grounding and phase reversal protection (MIL-HDBK-704-8 : LDC 602)

Power interruption (MIL-HDBK-704-8 : LDC601)

MIL-STD-1275D

Surge and Spike protection (Imported and Exported) in normal operating mode

Surge and Spike protection (Imported and Exported) in generator operating mode Ripple Voltage Imported

MIL-STD-461G

Conducted susceptibility (CS101, CS114, CS115, CS116)

Radiated emission (RE102, RS103)

Conducted emission (CE101, CE102)

MIL-STD-810H

Operating temperature: - 40°C to 71°C (MIL-810G, Methods 501.502)

Storage temperature: - 40°C to 85°C (MIL-810G, Methods 501.502)

Operating shock: 40g, 11ms, 3 pos/neg per axis, 18 terminal peak sawtooth pulses (MIL-STD-810H, Method 516.8, Procedure V)

Crash Hazard Shock: 75g, 11ms, 2 pos/neg per axis, 12 terminal peak sawtooth pulses (MIL-810H, Method 516.8, Procedure V)

Random vibration: 10Hz to 2000Hz, 3 axes, 1 Hour/Axis (MIL-STD-810H, Method 514.8, Procedure I)

Humidity: Up to 95% RH @, Non-condensing (MIL-STD-810H, Method 507.6, Procedure II)

Ingress, sand and dust: No ingress (IP67) (MIL-STD-810H, Method 510.7, Procedure I and II)

Water immersion: No leakage (IP67) (MIL-STD-810H, Method 512.6, Procedure I)

Operational Altitude: Up to 15,000 feet (4,572 meters) (MIL-STD-810H, Method 500.6)

Storage Altitude: Up to 40,000 feet (12,192 meters) (MIL-STD-810H, Method 500.6)

RTCA DO-160G

Electrostatic Discharge, Category A

MIL-STD-464C

Electrical Bonding

Physical

Dimensions (H|W|D): 76mm x 162mm x 203mm (3.0" x 6.4" x 7.0")

Actual weight: 4.5lbs. (2.04Kg)

Cooling: Passive. No fans

Optional conformal coating: Humiseal 1A33 applied in accordance with MIL-I-46058

Circular MIL-DTL-38999 connectors

I/O Connections

2x 10/100/1000 WAN ports

4x 10/100/1000 LAN ports

1x Console - RS232/USB2.0

1x USB2.0 Host Interface

1x Isolated Zeroization Signal

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I/O Connections

	1x RS-232 DTE Terminal
	1x Alarm Input
	mSATA, SATA 3.0 Drive (Optional)
	RTC Battery (20 year lifespan)

Power

	Input power: 14V to 36V DC, 28V <15W nominal
	<15W max power consumption
	MIL-STD-461G, MIL-STD-704F, MIL-STD-1275D, & MIL-STD-810G compliant
	Over-voltage protection, Reverse polarity protection, & Galvanic isolation of 1500V

ORDER INFORMATION

Description	Model Number
NetSys-5310 including: IOS Software requirements, Cisco IOS XE Software: Universal Cisco IOS Software image, Cisco IOS XE Software Release 17.1.1 or later	NTS53ZUUX102YXXZ
I/O Cable Kit	NetSys-5310-CBL

PERFORMANCE TIERS AND SOFTWARE PACKAGES

Throughput	Network Essentials	Network Advantage
Default (50 Mbps)	SL-6300-NE/DEF-K9	SL-6300-NA/DEF-K9
Performance (250 Mbps)	SL-6300-NE/PERF-K9	SL-6300-NA/PERF-K9
Boost (350 Mbps)	SL-6300-NE/BOOS-K9	SL-6300-NA/BOOS-K9

SOFTWARE OPTION

HSEC license	Part Number
Cisco Unified Communications Manager Express – 1 seat	CME-UL

BOOST LICENSE REQUIREMENT

HSEC license	Part Number
High-security license, required with Boost license	L-63-HSEC-K9

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Please contact our sales team for more details.China: +86 21 5866 5908
France: +33 388 56 72 50Germany: +49 7231 97 34 0
Israel: +972 3 930 50 25Singapore: +65 6479 8552
Switzerland: +41 44 933 41 11United Kingdom: +44 1234 838 822
United States: +1 510 656 3400