DATA SHEET

NetSys-5312 RUGGED CISCO ESR-6300 ROUTER & ESS-3300 SWITCH

FIREWALL, COMPACT MOBILE, IP ROUTER WITH POE+ SUPPORT

ELMA
Your Solution Partner

DESCRIPTION

The rugged design of the NetSys-5312 brings IP Routing, Firewall, POE+, and L2 Switching with 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.

cisco Technology

NetSys-5312

Functional Features

- Cisco IOS XE is highly programmable, with open and standards-based APIs and next-generation, multilayer security built-in

Router

- Multiple Ethernet ports
- Two WAN and Three LAN 1000BASE-T ports
- ARM Quad-Core A72 CPU, 1200MHz
- Trust Anchor module (TAm) and Secure Boot
- Two RS-232, USB3.0(Host), Alarm, Zeroize
- Hardware-accelerated encryption, IPSec, VPN
- Cisco firewall functions

Switch

- 1G and 10G Ethernet
- Two 10G fiber (SMF Long Range)
- Two RS-232 (Console RS232 to USB2.0)
- Seven 1000BASE-T, Up to 23 possible
- USB2 Host Port, Alarm and Zeroize input
- Seven Power over Ethernet ports (copper links)

Benefits

- Enterprise-grade Cisco IOS XE routing and switching secu-rity features help ensure highly secure voice, video, and data communication
- 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
- Cisco IOS software familiarity minimizes training expense

APPLICATIONS

The NetSys-5312 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-5310

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

I/O Connections

	2x 10/100/1000 WAN ports
	4x 10/100/1000 LAN Ports
	RS-232 and USB 2.0 console ports
	1x USB 3.0 HOST INTERFACE (High speed 10GHz connector)
	1x Isolated Zeroization Signal
	1x RS-232 DTE Terminal
	1x Alarm Input
	mSATA, SATA 3.0 Drive (Optional)
	RTC Battery (20 year lifespan)

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Physical

	Dimensions (H|W|D): 116mm x 251mm x 239mm (4.6" x 9.9" x 7.6")
	Actual weight: 11.5lbs. (5.21Kg)
	Cooling: Passive. No fans
	Circular MIL-DTL-38999 connectors

Power

	Input power: 16.5V to 50V DC, 28V <50W nominal (without POE, <130W with 70W POE load)
	Over-voltage protection, Reverse polarity protection, & Galvanic isolation of 1500V

Power over Ethernet (NetSys-5312 Only)", with IEEE802.3 at Type 1(POE) and Type 2 (POE+) 120W built-in PSE

ORDER INFORMATION

Description	Model Number
NetSys 5312 including: IOS Software requirements, Cisco IOS XE Software: Universal Cisco iIOS Software image, Cisco IOS XE Software Release 17.1.1 or later	NT53ZUUXX212XYESZ-POE
I/O Cable Kit	NetSys-5312-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

Please contact our sales team for more details.

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