

Resilience Gateway ACM7000-L

With Smart OOB™ and Failover to Cellular™



Features

- Smart OOB with Failover to Cellular
- Maintain network connectivity during failures with IP Passthrough
- Available with 4 port embedded switch
- Flexibility with built-in 4 USB console ports
- New highspeed global cellular modem - LTE-A Pro
- Built-in digital I/O and high voltage I/O
- Compact and powerful hardware with integrated 4 GB internal storage



Console Specifications	
Console Ports	ACM7004-2-L – 4 x RJ45 RS-232 Cisco straight pinout console ports ACM7004-5-L – 4 x RJ45 RS-232 Cisco straight pinout console ports and 4 port embedded Gigabit Switch ACM7008-2-L – 8 x RJ45 RS-232 Cisco straight pinout console ports
Interface	
Ethernet Ports	ACM7004-2-L – 2 x 10/100/1000 Ethernet ACM7004-5-L – 4 x 10/100/1000 Ethernet Switch and 1 x 10/100/1000 Ethernet/SFP Uplink ACM7008-2-L – 2 x 10/100/1000 Ethernet All Ethernet/SFP Fiber port with 1500V AC Isolation and ESD Protection
Serial Ports	Cisco straight 50 to 230,400 bps
USB Ports	4 x USB 2.0 Console Ports
Remote Access	Integrated 4G LTE Cellular Card, Dual Ethernet, aggregation & redundancy, Automatic Network Failover, Easy browser UI, IPv6
I/O Ports	2 x TTL level Digital I/O ports (DIO) 5V DC max @ 20mA (supports external water /smoke / motion dry contact sensors) 2 x High Voltage Digital Outputs (HVDO) 5-30V DC@ 100mA (drives relays, alarms, etc.)
Console Management	Built-in web terminal SSH direct to consoles Optional console keystroke logging Alert on cable disconnects, text pattern match and more Inline power control Multiple concurrent sessions
Power Requirements	
Power Adapter	110-240V AC to 12V DC external power adapter PSE Mark, BIS Mark
Power Consumption	Less than 11.5W
Physical Dimensions	
Dimensions and Weight	5 1/8 x 4 3/4 x 1 3/8 in – 1.3 lbs., 13 x 12 x 3.5 cm - 0.6 kg
Form Factor	Compact
Memory & CPU	
CPU	800 MHz Armada 370 ARMv7 SoC (Marvell 88F6W11)
Memory	256 MB DDR3 SDRAM 32 MB Embedded NOR Flash
Internal Storage	4 GB NAND Flash
Environmental	
Operating Temperature	-25°C to 60°C, -13°F to 140°F
Storage Temperature	-40°C to +75°C, -40°F to +167°F
Humidity	5% to 90%
Environmental Monitoring	Internal temperature sensor and external serial EMD5000 device supports physical, smoke, water leak, vibration sensors
MTBF	100,000 Hours (Power Supply)
Security, Encryption & Authentication	
	SSH FIPS-140-2 compliant Open SSL Module Strong ciphers -AES encryption Cisco-compatible IPsec OpenVPN AAA – TACACS+, RADIUS, Active Directory/OpenLDAP, Kerberos, with local fallback Two-factor authentication via remote AAA Configurable stateful firewall Actively developed & support and security notifications-frequent firmware updates
Automation & Scalability	
	ZTP, Lighthouse RESTful API, programmable and extensible Auto-Response, SNMP, LLDP, NTP
Cellular	
Modules	Sierra Wireless EM7565 Cat-12 600Mbps/150Mbps (Download/Upload) AT&T and Verizon Certified
Cellular Certification	MIC-R and MIC-T Certified Japanese carriers PTCRB, GCF KDDI/docomol/Softbank/Telstra (Coming Soon)
Certifications	
Emissions	EN 55022:2010, CISPR 22:2008, FCC Part 15 Subpart B:2015, ICES-003 Issue 5 (2014), AS/NZS CISPR 22:2009+A1:2010, EN 61000-3-2:2006/A2:2009, EN 61000-3-3:2008 EN 55024:2010, CISPR 24:2010,
Immunity	EN 61000-4-2:2009, EN 61000-4-3:2006+A2:2010, EN 61000-4-4:2004+A1:2010, EN 61000-4-5:2006, EN 61000-4-6:2009, EN 61000-4-8:2010, EN 61000-4-11:2004 CE, UL 1950, TUV, C-Tick, RoHS compliant, Security features to support NERC CIP standards, FIPS 140-2 validated module Certificate #2473
Other Agency Approvals	

Available Models

	Model	Description
4 Port Serial Console	ACM7004-2-L	4 x serial Cisco Straight pinout, 2 x GbE Ethernet, Global cellular LTE-A Pro
4 Port Serial + 4 Port Switch	ACM7004-5-L	4 x serial Cisco Straight pinout, 1 x GbE Ethernet or fiber SFP & 4 x port GbE switch, Global cellular LTE-A Pro
4 Port Serial Console	ACM7008-2-L	8 x serial Cisco Straight pinout, 2 x GbE Ethernet, Global cellular LTE-A Pro

Package Checklist

- Resilience Gateway
- External rack mount tab
- Black terminal block
- 2 x Blade antennas
- DB9F-RJ45 adapter
- 4 x Rubber feet
- 12v Global Power Supply
- Antenna Extension Kit
- Quick Start Guide

Optional Accessories

	Part Number	Description
Adapters	319014	Adapter - DB9F to RJ45 straight serial - DCE - For X2 Pinout
	319015	Adapter - DB9F to RJ45 crossover serial - DTE - For X2 Pinout
	319016	Adapter - DB9M to RJ45 straight serial - DCE - For X2 Pinout
Environmental	EMD5000-02	Environmental Monitoring Device - X2 Pinout
	EMD5781-10	Door contact sensor - 10' Cable length
	EMD5782	Vibration sensor - 3' Cable length
	EMD5779-Q	Smoke detector/alarm (220V AC, IEC C-13)
	EMD5890-QA	Smoke detector/alarm (110V AC, NEMA 5-15)
Mounting	EMD5780	Water leak detector - 3' Cable length
	590003	Rack Mount Kit - Ears and Screws - ACM7000
	590012	DIN Rail - ACM7000
Power Supply	590033	Rack Mount Tray - All ACM Series
	450031	Power Supply – 12VDC Four Chamber Square Connector - ACM7000
	450032	Power Supply – External AC 12V with IEC input
Cellular	SDC48-12V-4PIN	Power Supply – External D/C 12v (36v to 72v) - ACM7000 Models
	569018	Antenna - GPS Active - 6' Cable length - For all 4G LTE Cellular units
	569028	Antenna - 5" Blade 4G LTE with swivel base (-LMx models)
	449041	Antenna Extender - Magnetic Base with 10' Cable
	590051	Antenna Extension Kit
	569041	Antenna - Blade LTE-A with swivel base (-L model)

Warranty

Part Number	Description
Included	4-year standard warranty
OGEXTWAR5-ACM70	Warranty ACM7000 (Extends to 5th year warranty)
OGEXTWAR6-ACM70	Warranty ACM7000 (Extends to 6th year warranty)

Resilience Gateway ACM7000-LMx

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Features

- Smart OOB with Failover to Cellular
- Maintain network connectivity during failures with IP Passthrough
- Available with 4 port embedded switch
- Flexibility with built-in 4 USB console ports
- Multicarrier cellular modules for carrier diversity
- Built-in digital I/O and high voltage I/O
- Compact and powerful hardware with integrated 4 GB internal storage



Console Specifications	
Console Ports	ACM7004-2-LMx – 4 x RJ45 RS-232 Cisco straight pinout console ports ACM7004-5-LMx – 4 x RJ45 RS-232 Cisco straight pinout console ports and 4 port embedded Gigabit Switch ACM7008-2-LMx – 8 x RJ45 RS-232 Cisco straight pinout console ports
Interface	
Ethernet Ports	ACM7004-2-LMx – 2 x 10/100/1000 Ethernet ACM7004-5-LMx – 4 x 10/100/1000 Ethernet Switch and 1 x 10/100/1000 Ethernet/SFP Uplink ACM7008-2-LMx – 2 x 10/100/1000 Ethernet All Ethernet/SFP Fiber port with 1500V AC Isolation and ESD Protection
Serial Ports	Cisco straight 50 to 230,400 bps
USB Ports	4 x USB 2.0 Console Ports
Remote Access	Integrated 4G LTE Cellular Card, Dual Ethernet, aggregation & redundancy, Automatic Network Failover, Easy browser UI, IPv6
I/O Ports	2 x TTL level Digital I/O ports (DIO) 5V DC max @ 20mA (supports external water /smoke / motion dry contact sensors) 2 x High Voltage Digital Outputs (HVDO) 5-30V DC@ 100mA (drives relays, alarms, etc.) Built-in web terminal SSH direct to consoles
Console Management	Optional console keystroke logging Alert on cable disconnects, text pattern match and more Inline power control Multiple concurrent sessions
Power Requirements	
Power Adapter	110-240V AC to 12V DC external power adapter
Power Consumption	PSE Mark Less than 11.5W
Physical Dimensions	
Dimensions and Weight	5 1/8 x 4 3/4 x 1 3/8 in – 1.3 lbs., 13 x 12 x 3.5 cm - 0.6 kg
Form Factor	Compact
Memory & CPU	
CPU	800 MHz Armada 370 ARMv7 SoC (Marvell 88F6W11)
Memory	256 MB DDR3 SDRAM 32 MB Embedded NOR Flash
Internal Storage	4 GB NAND Flash
Environmental	
Operating Temperature	-25°C to 60°C, -13°F to 140°F
Storage Temperature	-40°C to +75°C, -40°F to +167°F
Humidity	5% to 90%
Environmental Monitoring	Internal temperature sensor and external serial EMD5000 device supports physical, smoke, water leak, vibration sensors
Security, Encryption & Authentication	
	SSH FIPS-140-2 compliant Open SSL Module Strong ciphers -AES encryption Cisco-compatible IPsec OpenVPN AAA – TACACS+, RADIUS, Active Directory/OpenLDAP, Kerberos, with local fallback Two-factor authentication via remote AAA Configurable stateful firewall Actively developed & support and security notifications-frequent firmware updates
Automation & Scalability	
	ZTP, Lighthouse RESTful API, programmable and extensible Auto-Response, SNMP, LLDP, NTP
Cellular	
Modules	ACM700x-LMR – Sierra Wireless MC7304 ACM700x-LMx and ACM700x-LMCx – Sierra Wireless MC7354 ACM700x-LMP – Sierra Wireless MC7430 AT&T and Verizon Certified
Cellular Certification	MIC-R and MIC-T Certified Japanese carriers PTCRB, NAPRD.03, GCF-CC, R&TTE, EN 301 511, A-Tick (GSM/UMTS) CDG TIA/EIA-690, CDG TIA/EIA-98-E (CDMA/EV-DO)
Certifications	
Emissions	EN 55022:2010, CISPR 22:2008, FCC Part 15 Subpart B:2015, ICES-003 Issue 5 (2014), AS/NZS CISPR 22:2009+A1:2010, EN 61000-3-2:2006/A2:2009, EN 61000-3-3:2008
Immunity	EN 55024:2010, CISPR 24:2010, EN 61000-4-2:2009, EN 61000-4-3:2006+A2:2010, EN 61000-4-4:2004+A1:2010, EN 61000-4-5:2006, EN 61000-4-6:2009, EN 61000-4-8:2010, EN 61000-4-11:2004
Other Agency Approvals	CE, UL 1950, TUV, C-Tick, RoHS compliant, Security features to support NERC CIP standards, FIPS 140-2 validated module Certificate #2473
Warranty	4 Years hardware and support

Available Models

	Model	Description
4 Port Serial Console	ACM7004-2-LMA	4 x serial Cisco Straight pinout, 2 x GbE Ethernet, AT&T 4G LTE cellular
	ACM7004-2-LMV	4 x serial Cisco Straight pinout, 2 x GbE Ethernet, Verizon 4G LTE cellular
	ACM7004-2-LMR	4 x serial Cisco Straight pinout, 2 x GbE Ethernet, Rest of World 4G LTE cellular
	ACM7004-2-LMCT	4 x serial Cisco Straight pinout, 2 x GbE Ethernet, Telus 4G LTE cellular
	ACM7004-2-LMCR	4 x serial Cisco Straight pinout, 2 x GbE Ethernet, Rogers 4G LTE cellular
	ACM7004-2-LMP	4 x serial Cisco Straight pinout, 2 x GbE Ethernet, APAC 4G LTE cellular
4 Port Serial + 4 Port Switch	ACM7004-5-LMA	4 x serial Cisco Straight pinout, 1 x GbE Ethernet or fiber SFP & 4 x port GbE switch, AT&T 4G LTE cellular
	ACM7004-5-LMV	4 x serial Cisco Straight pinout, 1 x GbE Ethernet or fiber SFP & 4 x port GbE switch, Verizon 4G LTE cellular
	ACM7004-5-LMR	4 x serial Cisco Straight pinout, 1 x GbE Ethernet or fiber SFP & 4 x port GbE switch, Rest of World 4G LTE cellular
	ACM7004-5-LMCT	4 x serial Cisco Straight pinout, 1 x GbE Ethernet or fiber SFP & 4 x port GbE switch, Telus 4G LTE cellular
	ACM7004-5-LMCR	4 x serial Cisco Straight pinout, 1 x GbE Ethernet or fiber SFP & 4 x port GbE switch, Rogers 4G LTE cellular
	ACM7004-5-LMP	4 x serial Cisco Straight pinout, 1 x GbE Ethernet or fiber SFP & 4 x port GbE switch, APAC 4G LTE cellular
4 Port Serial Console	ACM7008-2-LMA	8 x serial Cisco Straight pinout, 2 x GbE Ethernet, AT&T 4G LTE cellular
	ACM7008-2-LMV	8 x serial Cisco Straight pinout, 2 x GbE Ethernet, Verizon 4G LTE cellular
	ACM7008-2-LMR	8 x serial Cisco Straight pinout, 2 x GbE Ethernet, Rest of World 4G LTE cellular
	ACM7008-2-LMCT	8 x serial Cisco Straight pinout, 2 x GbE Ethernet, Telus 4G LTE cellular
	ACM7008-2-LMCR	8 x serial Cisco Straight pinout, 2 x GbE Ethernet, Rogers 4G LTE cellular
	ACM7008-2-LMP	8 x serial Cisco Straight pinout, 2 x GbE Ethernet, APAC 4G LTE cellular

Package Checklist

- Resilience Gateway
- External rack mount tab
- Black terminal block
- 2 x 4G LTE blade antennas
- Dual SIM holder
- DB9F-RJ45 adapter
- 4 x Rubber feet
- 12v Global Power Supply
- Quick Start Guide

Optional Accessories

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