

Summary Points

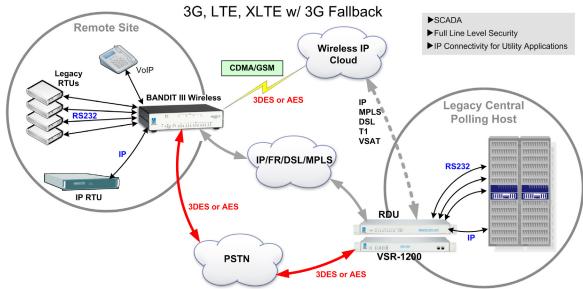
- Industrial hardened cyber security appliance
- IP Sec with DES, 3DES, and AES (256)
- Manageability (Monitoring and Configuration)
- Provides connectivity over any network (MPLS/Frame Relay or IP network to include Fiber, Ethernet, VSAT)
- Cellular connectivity options - 3G, LTE Only, XLTE w/ 3G Fallback
- Up to 6 serial ports for legacy traffic support
- Alarm Ports
- Legacy protocol support serial and IP conversion

INDUSTRIALLY HARDENED SECURITY APPLIANCE

The BANDIT 3[™], the latest addition to the Encore's BANDIT[™] (Broadband Access Network Device for Intelligent Termination[™]) family, is an industrially hardened cyber security appliance with integrated router, firewall, terminal server, serial to IP converter, legacy protocol conversion, and VPN functionality. Ideally suited for electric, gas, oil and water utilities, AMI/AMR, transportation, green energy, and traffic control system applications, the BANDIT 3[™] ensures system data and SCADA network connections directly to the Internet, secure Wide Area Network (WAN) and/or Local Area Network (LAN), or commercial cellular data IP services. Cyber security is an urgent issue in industries where advanced automation and communications networks have mission critical applications and high reliability is of paramount importance. These industries have mandated industry specific requirements to ensure their data networking and cyber assets are reliable and secure. The BANDIT 3[™] has the necessary features to comply with the most stringent security requirements.

The BANDIT 3[™] supports up to 6 serial RS232 ports, integrated four port fully managed Ethernet switch, selectable power supplies and redundancy options, and an optional integrated V.92 modem. In addition, the BANDIT 3[™] supports two expansion slots supporting optional digital connectivity modules such as Fiber, Ethernet DMZ, T1/E1 CSU/DSUs, 56/64K CSU/DSU, MPLS, or 4 wire E&M, allowing for connectivity to microwave, satellite, IP, Frame Relay/MPLS services, analog radio and/or cellular connectivity modules allowing connectivity to public carrier secure cellular data services. Supported cellular interfaces include CDMA 1X/EVDO Rev A and GSM GPRS/EDGE/UMTS/HSDPA/HSPA.

Application Diagram





TECHNICAL SPECIFICATIONS

GENERAL FEATURES	Protocol management (spoofing) and translation	
	NERC CIP (003, 005, 007, 009) compliant firewall security	
	Secure Wireless Cellular connection	
	SNMP manageability (Monitoring and Config)	
	Operating System (OS) and Configuration Servers	
	Disaster Recovery and Load Sharing	
	QoS Enforcement	
	VPN	
CECUDITY ADDITANCE FEATURES	Integrated router/firewall/VPN	
SECURITY APPLIANCE FEATURES	DMZ LAN port	
	NAT	
	VPN (up to 30 tunnels)	
	 IP Sec (RFC 2401) with DES, 3DES and AES (256) 	
	• GRE (RFC 1701)	
	 Internet Key Exchange - IKE (RFC 2409) 	
	Selective Layer Encryption (SLE)	
	WAN	
PROTOCOLS	• MPLS	Synchronous PPP
	Frame Relay (RFC1490)	• X.25
	Asynchronous PPP	• MLPPP
	IP	
	 IP Routing (RIP v1/v2) or static routing 	• IP fragmentation/reassembly
	DHCP client/server/BootP/Relay	• IP routing over VPN
	IP QoS and traffic prioritization	• VRRP (RFC3768)
	Ethernet	(25735)
	802.1q VLAN tagging	• PPPoE
	Up to 5 DB25 ports supporting EIA/TIA RS485,RS232, RS-	
SERIAL LEGACY SUPPORT	Supports any asynchronous or synchronous traffic over	
	Protocol support for DNP3, IEC 60870- 5-101/103/104, MODBUS, CDC, S/NET, CONITEL, ABB, and most electrical	
	industry proprietary protocols; inquire for additional pro	
PHYSICAL PORTS	Serial	
PHISICAL PORTS	 1 universal DB25 port (RS232) 	• 1 RS232 console
	 Optional four DB25 ports (RS232) 	
	Modem - Optional	
	• integrated 56Kbps V.90/92 with PPP support (PAP/CHAP)	
	Ethernet	
	 4 10/100 Base T - 3 switched and 1 configurable 	
	Expansion Slot	
	• Dual Port Fiber Module – Multi or Single Mode SFPs	Ethernet DMZ
	 Single T1/E1 CSU/DSU channelized/unchannelized 	• Single Port High Speed Serial (V.35, RS 485, RS 422)
	 Dual T1/E1 CSU/DSU channelized/unchannelized 	Dual Port 4 wire E&M
	• 56/64k CSU/DSU	
	Alarm Port	
	Programmable alarm indicators	
	Optional	
	• CDMA (1xRTT), EVDO	• GSM, GPRS, EDGE, UMTS, HSDPA, HSPA
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	l 10 Watts maximum	
ELECTRICAL	10 Watts maximum DC: 12VDC, 24VDC, 48VDC, 130VDC, 250VDC	
ELECTRICAL	DC: 12VDC, 24VDC, 48VDC, 130VDC, 250VDC	
	DC: 12VDC, 24VDC, 48VDC, 130VDC, 250VDC AC: 100-240VAC, 50-60Hz (with external adapter)	
ELECTRICAL ENVIRONMENTAL	DC: 12VDC, 24VDC, 48VDC, 130VDC, 250VDC AC: 100-240VAC, 50-60Hz (with external adapter) Operating: -40°C to +85°C	
	DC: 12VDC, 24VDC, 48VDC, 130VDC, 250VDC AC: 100-240VAC, 50-60Hz (with external adapter) Operating: -40°C to +85°C Storage: -40°C to +85°C	
ENVIRONMENTAL	DC: 12VDC, 24VDC, 48VDC, 130VDC, 250VDC AC: 100-240VAC, 50-60Hz (with external adapter) Operating: -40°C to +85°C	Depth: 7.5" (219.1 cm)
	DC: 12VDC, 24VDC, 48VDC, 130VDC, 250VDC AC: 100-240VAC, 50-60Hz (with external adapter) Operating: -40°C to +85°C Storage: -40°C to +85°C Humidity: 5 to 95%, non-condensing Height: 2.375" (6.0 cm)	Depth: 7.5" (219.1 cm) Weight: 2.25 lb. (1.02 kg)
ENVIRONMENTAL MECHANICAL	DC: 12VDC, 24VDC, 48VDC, 130VDC, 250VDC AC: 100-240VAC, 50-60Hz (with external adapter) Operating: -40°C to +85°C Storage: -40°C to +85°C Humidity: 5 to 95%, non-condensing Height: 2.375" (6.0 cm) Width: 10.375" (26.4 cm)	Depth: 7.5" (219.1 cm) Weight: 2.25 lb. (1.02 kg)
ENVIRONMENTAL	DC: 12VDC, 24VDC, 48VDC, 130VDC, 250VDC AC: 100-240VAC, 50-60Hz (with external adapter) Operating: -40°C to +85°C Storage: -40°C to +85°C Humidity: 5 to 95%, non-condensing Height: 2.375″ (6.0 cm) Width: 10.375″ (26.4 cm) RoHS Compliant	Weight: 2.25 lb. (1.02 kg)
ENVIRONMENTAL MECHANICAL STANDARDS COMPLIANCE	DC: 12VDC, 24VDC, 48VDC, 130VDC, 250VDC AC: 100-240VAC, 50-60Hz (with external adapter) Operating: -40°C to +85°C Storage: -40°C to +85°C Humidity: 5 to 95%, non-condensing Height: 2.375" (6.0 cm) Width: 10.375" (26.4 cm) RoHS Compliant EMC FCC Part 15, EN 55011/CISPR II, IEC 61850-3, IEEE 16	Weight: 2.25 lb. (1.02 kg)
ENVIRONMENTAL MECHANICAL	DC: 12VDC, 24VDC, 48VDC, 130VDC, 250VDC AC: 100-240VAC, 50-60Hz (with external adapter) Operating: -40°C to +85°C Storage: -40°C to +85°C Humidity: 5 to 95%, non-condensing Height: 2.375″ (6.0 cm) Width: 10.375″ (26.4 cm) RoHS Compliant	Weight: 2.25 lb. (1.02 kg)

Specifications subject to change without notice



Pulse Supply