PortaBella Industrial 141i

Broadband Bonding™ Network Appliance

The PortaBella-industrial Broadband Bonding Network Appliance, BBNA141i, enables cost-effective Internet connectivity via bonding together multiple cellular Internet access cards for increased performance and reliability. The BBNA141i aggregates the capacity of as many as four USB based cellular data cards providing increased access bandwidth in both uplink and downlink directions.

BBNA141i FEATURES

Downlink/uplink bonding in peered mode Bonds Internet access lines for all types of traffic (including encrypted traffic such as VPN) for aggregated downlink and uplink capacity when peered over the Internet with a Bonding Proxy Appliance device located at the headquarter office or data center. For single office setups optional Broadband Bonding Service subscription enables downlink/uplink bonding.

Aggregated downlink capacity in standalone mode - When not peered with a BPA device, all HTTP downlink sessions use the aggregated bandwidth of the combined Internet access links, even in the case of a single HTTP session. For non-HTTP downlink sessions and all uplink sessions, PortaBella provides session-based intelligent load balancing across the access links in standalone mode.

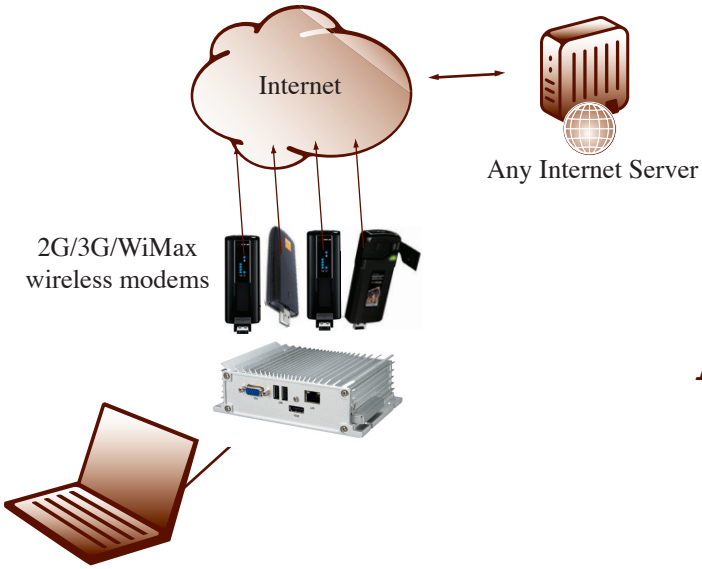
Link failure recovery & link failover - In case of Internet access line failures, the PortaBella keeps the ongoing sessions alive by retransmitting the lost packets over the available access lines, even for the sessions in progress, without loss of data integrity. Additionally automatic failover protects against failures of one or more access link outages.

Advanced QoS algorithms – All traffic routed through the PortaBella is intelligently managed to prioritize real-time traffic. Additionally a unique set of proprietary algorithms are implemented to improve real-time traffic latency metrics. For low latency/jitter video applications, subscription to the video optimization module is required.

Transparent installation – The existing Local Area Network does not require any changes. No coordination, new equipment or software is needed from the Internet Service Provider(s). A remotely accessable browser-based management interface provides quick and easy configuration and system monitoring.

Hardened design – PortaBella BBNA141i has a wide temperature range and a ruggedized design targeted for industrial applications. BBNA141i supports a wide temperature range from -20 °C up to 70°C, shock resistant to 70G and vibration resistant to 7G.

Bonding the world



"fastest mobile wireless Internet access available"

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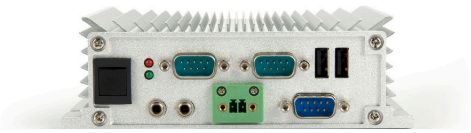
BBNA141i Front Panel

BBNA141i Rear Panel



BBNA141i HARDWARE SPECIFICATIONS	
Mechanical Dimensions	150mm(W) x 45mm (H) x 108mm(D), ultra portable
Weight	1.32 lbs (0.6kg)
Vibration Loading During Operation	7Grms, IEC 60068-2-64, random, 5 ~ 500Hz, 1 Oct./min, 1hr/axis
Shock During Operation	70G, IEC 60068-2-27, half size, 11ms duration
Input Power Requirement	external power 12V DC @ 1.60A (typical: 13.35W to 19.14W)
USB ports	4 (for cellular data card)
LAN ports (10/100baseT, auto-sensed)	1 (RJ-45 Ethernet connector)
Wired WAN ports	None
Certifications	FCC, CE, CCC Class A, RoHS-5, ICES-03, UL, cUL
Operating Temperature Range	14 - 140 F, -10 - 60 °C
Operating Humidity Range	0-90%, non-condensing
Storage Temperature Range	-4 - 158 F, -20 - 70 °C
Storage Humidity Range	5-95%, non-condensing
Cooling	Active cooling with fan

BBNA141i SOFTWARE SPECIFICATIONS	
Max throughput	85 Mbits/sec
Max number of concurrent IP sessions	50,000 (customizable for higher number of concurrent IP sessions)
Device management	-Web based management -SNMP -Remote syslog -Email Alerts
DHCP and DNS servers	-DNS relay -Parallel DNS optimization -Support for DHCP server
DDNS	-Support dynamic DNS for multiple interfaces
WAN configurations	-Support for various configuration modes: static, PPPoE, DHCP, Passthrough. -Selectable "failover-only" or "aggregate" modes for cellular data cards and other WAN ports. -User configurable WAN interface binding
Routing	NAT and IP Forwarding, QoS and inbound/outbound VoIP quality management
VOM	Supports Video Optimization Module service

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