CradlePoint ARC MBR1400 Series

INTEGRATED MOBILE BROADBAND ROUTER
Wireless WAN connectivity for distributed business locations

Keep Your Business Network Online with High-Speed Wireless Broadband

WIRELESS WAN CONNECTIVITY

The CradlePoint MBR1400 Integrated Business Series Routers enable easy-to-install wireless connectivity in fixed-business locations. Ideal for distributed enterprises such as branch offices, retail POS locations, restaurants, and small businesses. The MBR1400 provides wired Ethernet and 3G/4G wireless WAN connectivity to keep your business up and running.

BUSINESS CONTINUITY

As businesses increasingly move to cloud computing and are more heavily dependent on remote applications, reliable Internet connectivity becomes mission-critical for business success. CradlePoint's Integrated Business Series Routers combine the power and flexibility of our flagship router with an embedded business-grade wireless WAN modem to provide a fully-integrated business continuity solution.

FLEXIBLE

- The integrated 3G/4G wireless modem can be used as failover for when the wired connection is disrupted, or as primary connect when wire-line is not available or impractical.
- Create alternate networks, off the main corporate network, such as public WiFi to simplify PCI compliance, video surveillance, digital signs, kiosks, etc.
- Load balance across the wired and wireless connections when additional bandwidth is required.

SECURE AND RELIABLE

- LAN connections are protected with advanced WiFi encryption, LAN Segmentation, and vLAN capabilities.
- Main office access and POS transactions are protected by VPN capability, and other security features to ensure your network stays secure.
- Designed for PCI compliant network architectures.
- Engineered for day-in, day-out 24/7 Internet connectivity, the Integrated Business Series Routers ensure reliable connections when you need them.

REMOTE MANAGEMENT, SERVICE AND SUPPORT

- WiPipe Central Remote Management Portal enables remote configuration, network wide firmware updates and a variety of reporting and alerting capabilities to prevent overage charges.
- In addition to the standard 1 year warranty, Standard and Proactive Enterprise Support Agreements are available.

ENTERPRISE PERFORMANCE

CradlePoint MBR1400 Integrated Business Series Routers offer the latest in high-speed 3G/4G wireless connectivity to deliver the continuous uptime and bandwidth needed to support growth in cloud computing and ensure against loss of productivity and business opportunity.
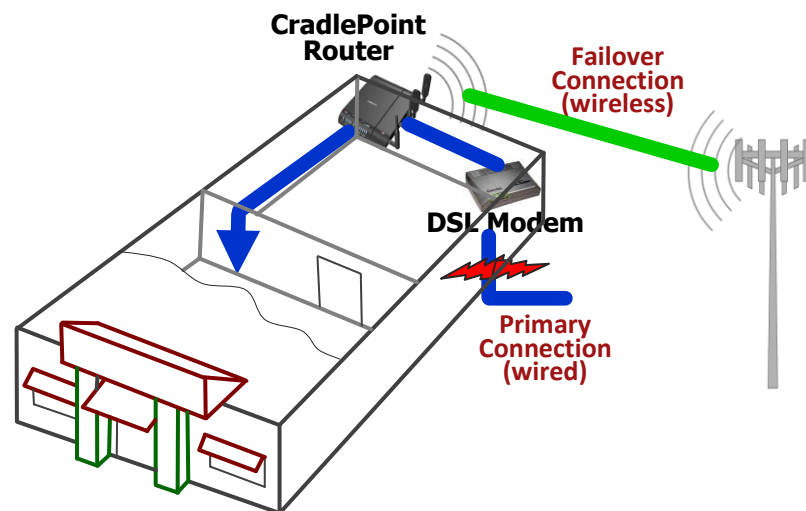
www.cradlepoint.com/ARCMBR1400

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MBR1400 Integrated Mobile Broadband Router

Key Feature and Benefits

Internet Access and Device Connectivity

Integrated high-speed 3G/4G modem
- Verizon 4G LTE / 3G EVDO
- Verizon 3G EVDO
- Sprint and CLEAR 4G WiMAX
- Sprint 3G EVDO

5 Ethernet 10/100/1000 LAN/WAN ports for Ethernet-Enabled devices or landline Internet

Wireless LAN - WiFi (802.11 a/b/g/n) Supports up to 128 connections at a time

Business Continuity: Failover/Failback

Automatic failover to Wireless WAN connection when wired WAN disruption occurs, automatic failback when wired WAN connection is restored

Load balancing across multiple wired and wireless WANs for more bandwidth

Proactive alerts when failover occurs through WiPipe Central™

Flexibility

First-time and Advanced setup wizards for easy, swift and secure setup

Remote management with WiPipe™ Central, SNMP v1,2,3 or CLI over SSH

Four SSIDs, with individual security and QoS settings, separate critical traffic or create a public WiFi hotspot

Create a WiFi hotspot with a captive portal (terms of service, ads, etc).

"WiFi-as-WAN" mode enables use as a WiFi repeater, WiFi Bridge or as a WiFi-to-Ethernet adapter for Ethernet-enabled devices

Multiple Ethernet ports can be configured to "WAN Mode" to provide wireless and wired failover and load balancing

Data usage management and alerts to monitor data usage and avoid overages

LAN/WAN Affinity to assign specific LAN traffic to a WAN

Serial console available to control another attached device (USB to Serial)

Security

IPsec VPN (Up to 20 concurrent sessions) with GRE Tunneling Option, also supports pass-through VPN connections (IPSec, L2TP, PPTP)

WEP, WPA, WPA2 and AES encryption for secure WiFi

Stateful Packet Inspection firewall and NAT (Network Address Translation) to prevent unwanted access to connected computers

Advanced security mode and reporting to facilitate PCI-DSS compliance

Variety of security features (URL filtering, traffic filtering, DMZ, virtual server, port forwarding) for safer internet access.

VLAN support to isolate, segment and secure your network

Service, Support, and Warranty

Limited 1 Year Warranty included , access to software updates and hardware repair or replacement

CradleCare Plus and CradleCare Premier enterprise support agreements available with 24/7 technical support, software updates and upgrades and advanced hardware exchange

Specifications

DATA IN: Wireless WAN modem, 10/100/1000 Ethernet Ports (cable/DSL/satellite modems), WiFi (as WAN) Wireless 3x3 MIMO "N" WiFi 2.5GHz or 5GHz (802.11 a/b/g/n)

DATA OUT: WiFi (802.11 a/b/g/n), Five 10/100/1000 Ethernet Ports (WAN/LAN Switchable)

TEMPERATURE: 0°C to 40°C (32°F to 104°F) Operating
-20°C to 70°C (-4°F to 158°F) Storage

RELATIVE HUMIDITY (non-condensing): 10% to 85%, Operating
5% to 90%, Storage

SIZE: 9-in x [5.1 or 7.25 or 9.6]-in x 1.6-in (230-mm x [130 or 185 or 245]-mm x 40-mm)

CERTIFICATIONS: FCC, WiFi Alliance, 802.3, plus carrier specific certifications

WIFI POWER: Transmit Power: 25dBm typ for all modes
Receive Sensitivity: -69dBm typ (11n), -72dBm typ (11g), -84dBm typ (11b)

What's In The Box (Integrated Versions)

MBR1400 with integrated business-class wireless WAN modem

External 3G or 4G mobile broadband modem antennas (2) (SMA) w/ multiplexing for GPS (on some models), finger tighten only

External high-gain WiFi antennas (3) Reverse SMA (2dBi, 2.4GHz), finger tighten only

12V / 1.5A power supply

Quick Start Guide with warranty information

Requirements

Internet Service: Active Mobile Broadband plan with cellular provider or Ethernet-based Internet connection (DSL, Cable, T1)

Browser (to configure router) Minimum of Firefox v2.0, Internet Explorer v7.0, Chrome, or Safari v1.0

Router Details

WAN Security NAT, SPI, ALG, inbound filtering of IP addresses, port blocking, service filtering (FTP, SMTP, HTTP, RPL, SNMP, DNS, ICMP, NNTP, POP3, SSH), protocol filtering, WAN ping (allow/ignore)

Redundancy and Load Balancing Failover/Failback with 4G/3G /Ethernet, Load Balancing, WAN Failure Detection

Intelligent Routing UPnP, DMZ, virtual server/port forwarding, routing rules, NAT-less routing, route management, content filtering, website filtering, local DHCP server, DHCP client, DNS, DNS proxy. ALGs: PPTP, L2TP, PPPoE pass-through, IPSec pass-through, FTP (passive), FTP (active), MAC address filtering, Dynamic DNS, LAN/WAN affinity

Management WiPipe™ Central for remote configuration, updates and management (subscription-based); web-based GUI (local management); remote WAN web-based management w/access control (HTTP, HTTPS); SNMP v1, v2c & v3, CLI over SSH, API. One-button firmware upgrade; modem configuration, update and management, modem data usage and alerts

Performance & Health Monitoring WiPipe™ QoS, with traffic shaping, Modem Health Management (MHM) improves connectivity of modem, SSID-based priority*, WAN port speed control

VPN (IPSec). Tunnel, NAT-T and transport modes. Device to CradlePoint, Cisco/Linksys, Linux system, Hash (MD5, SHA128, SHA256, SHA384, SHA512), Cipher (AES, 3DES, DES), support for 20 concurrent connections, GRE tunneling, multiple networks supported in a single tunnel

GPS. Standalone GPS supported on most models (see attached). GUI mapping as well as local (LAN) or remote (WAN) server logging

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BUSINESS-GRADE MODEM SPECIFICATIONS:

MBR1400LE-VZ — 4G LTE/EVDO for Verizon

Technology: LTE 3GPP Rel. 8 , EVDO RevA, A/O; CDMA 1x

Downlink Rates: LTE 100 Mbps, EVDO 3.1 Mbps (theoretical)

Uplink Rates: LTE 50 Mbps, EVDO 1.8 Mbps (theoretical)

Frequency Band: LTE Band 13 (700MHz)
Cellular/PCS (800MHz/1,900 MHz)

Power: LTE 23 +/- 1 dBm, EVDO 24 +/- 1dBm (typical conducted)

Module: Sierra Wireless MC7750

Antennas: Two SMA male (plug), 1 dBi (LTE), 2 dBi (Cellular/PCS) gain. Finger tight is sufficient. Maximum torque spec is 7kgf-cm

GPS: standalone GPS support

Industry Standards & Certs: Modem Model MC200LE: Verizon; FCC Part 15, 22, 24 & 27; TIA/EIA/IS-2000, IS-95-B, 3GPP Rel 8

Modem Certification Model Number: MC200LE
Modem Certification Part Number: MC200LE-VZ

MBR1400W — 4G WiMAX for Sprint or CLEAR

Technology: WiMAX 802.16e Wave 2

Downlink Rates: 10Mbps peak, 6Mbps average

Uplink Rates: 5 Mbps peak, 1.2 Mbps average

Frequency Band: 2,500 MHz band

Power: 23.5 +/- 0.5 dBm (RSU/CPE)

Module: Beceem 250 chipset

Antennas: Two SMA male (plug), 5 dBi gain. Finger tight is sufficient. Maximum torque spec is 7kgf-cm

GPS: No GPS support

Industry Standards & Certs: Modem Model MC100W: Sprint; Clearwire; FCC Part 15 subpart C

Modem Certification Model Number: MC100W
Modem Certification Part Number: MC100W

MBR1400E-VZ — 3G EVDO for Verizon

Technology: EVDO RevA, A/O; CDMA 1x

Downlink Rates: 3.1 Mbps (theoretical)

Uplink Rates: 1.8 Mbps (theoretical)

Frequency Band: Cellular/PCS (800MHz/1,900 MHz)

Power: 24 +/- 0.5dBm (typical conducted)

Module: Sierra Wireless 5728v

Antennas: Two SMA male (plug), 2 dBi gain. Finger tight is sufficient. Maximum torque spec is 7kgf-cm

GPS: standalone GPS support

Industry Standards & Certs: Modem Model MC100E: Verizon IOT; FCC Part 15, 22 & 24, CDG Stages 1,2; IS-2000IA-98D/E, IS-134, IS-637B, IS-683A, IS-707A, IS-856, IS-866; JESD22-A114-B, JESD22-C101

Modem Certification Model Number: MC100E
Modem Certification Part Number: MC100E-VZ

MBR1400E-SP — 3G EVDO for Sprint

Technology: EVDO RevA, A/O; CDMA 1x

Downlink Rates: 3.1 Mbps (theoretical)

Uplink Rates: 1.8 Mbps (theoretical)

Frequency Band: Cellular/PCS (800MHz/1,900 MHz)

Power: 24 +/- 0.5dBm (typical conducted)

Module: Sierra Wireless 5728v

Antennas: Two SMA male (plug), 2 dBi gain. Finger tight is sufficient. Maximum torque spec is 7kgf-cm

GPS: standalone GPS support

Industry Standards & Certs: Modem Model MC100E: Sprint; FCC Part 15, 22 & 24, CDG Stages 1,2; IS-2000IA-98D/E, IS-134, IS-637B, IS-683A, IS-707A, IS-856, IS-866; JESD22-A114-B, JESD22-C101

Modem Certification Model Number: MC100E
Modem Certification Part Number: MC100E-SP

Ordering information

MBR1400 Integrated Business Series Routers	
ARC MBR1400LE-VZ	Business Series Router with dual-mode, high-performance 4G LTE / EVDO Wireless WAN connection for the Verizon Network, and 802.11 a/b/g/n
ARC MBR1400W	Business Series Router with high-performance WiMAX Wireless WAN connection for the Sprint or CLEAR Networks, and 802.11 a/b/g/n
ARC MBR1400E-VZ	Business Series Router with high-performance EVDO Wireless WAN connection for the Verizon Network, and 802.11 a/b/g/n
ARC MBR1400E-SP	Business Series Router with high-performance EVDO Wireless WAN connection for the Sprint Network, and 802.11 a/b/g/n

Accessories (see CradlePoint's antenna ordering and installation guide for more information)	
Part # 170587-000	Directional Patch antennas for external (outside) mounting (301157)
Part # 170588-000	Directional Yagi (Log-Periodic) antennas for external (outside) mounting (304411)
Part # 170586-000	Omni-directional antennas for external (outside) mounting (301202)

Remote Management	
WiPipe™ Central Remote Management Software	• Cloud-based remote management and monitoring tool that provides device status, manages firmware versions, and can configure all the settings on either individual or groups of devices in real-time. • Annual and multi-year license

Enterprise Support Agreements	
CradleCare Plus Enterprise Support Agreement	• 12/5 Technical Support, SW Upgrades, HW Repair/Replace
CradleCare Premium Enterprise Support Agreement	• Named Enterprise Technical Support Engineer with Proactive Communications • 24/7 Tech Support, SW Upgrades, Advanced HW Exchange