



Data Sheet E100



The Cradlepoint NetCloud Service for SOHO with the E100 Router is ideally suited for enabling mission-critical employees to work from home or outside the office with the same services, security, and ease of management. The portable, compact form factor includes full-featured routing, security, traffic shaping, and Wi-Fi, making it easy to connect and maintain connectivity to the Internet for supporting crucial business applications. The embedded LTE modem means that reliable, private connectivity is always available from day 1 without waiting for a wired connection and without having to depend upon consumer-class, underlying networking conditions.

Notable Features

- Extend office networking capabilities to critical remote employees without compromising security or reliability.
- Access the network or applications with an embedded LTE modem for fast, secure connectivity in the home, vacation home, or on the road.
- Integrate into your existing network with standards-based, dynamic routing, traffic-shaping and VPN tunnel support.
- Define policies through centralized, cloud-based management for easy deployment at scale.
- Use zero-touch deployment with pre-configured router and pre-inserted SIM to speed installation.
- Segment and isolate work devices — computers, printers, and more — from household network and devices.
- Expand working radius with secure, enterprise class Wi-Fi.

Ideal for Work from Anywhere

NetCloud Service for SOHO, combined with the E100 router, provides a dedicated connection for remote, mission-critical workers and executives with a similar experience as the office network, with access to critical cloud and corporate data center applications. Instead of relying on uneven levels of household equipment, this Work from Anywhere (WFX) solution offers IT providers cloud-based management to define and distribute policies, set security parameters, isolate corporate assets, and fine-tune bandwidth considerations in a uniform, corporate-class offering that interoperates with existing network solutions.

Dedicated Enterprise Network

By using a resilient, LTE connection dedicated to the corporate functions, the E100 series router avoids resource and bandwidth competition with other household devices on the network. Coupled with the high-speed connection and extension of company configurations through NetCloud, this extends an office-based environment to a secure network in a home, a remote office, or on the road. Additionally, this capability permits completely segmenting and isolating work devices — computers, printers, and more — from all other streaming and digital work in the household — ensuring high performance for key applications and providing a natural layer of information protection.

Performance

Stateful Firewall Throughput*	IPS Throughput*	Application Aware Services & Analytics*	IPSec VPN Throughput*	Concurrent VPN Tunnels	Concurrent Sessions (TCP)	Typical Client Count
850 Mbps	250 Mbps	250 Mbps	40 Mbps	20	32,000	5

* All performance throughput data is preliminary, subject to change.

Performance Framework: All testing conducted based on requirements as defined in RFC2544 using fixed-frame 1518 byte packets. Throughput results reflect uni-directional UDP traffic with less than 1% packet loss as tested with wired connections.

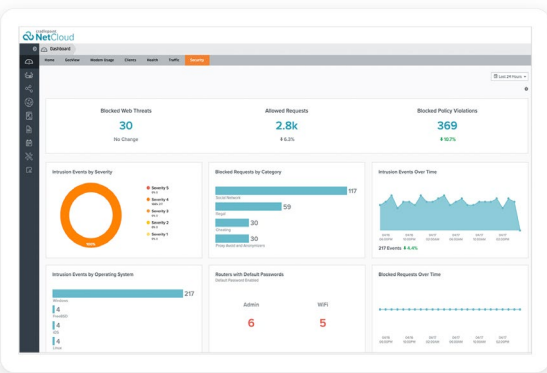
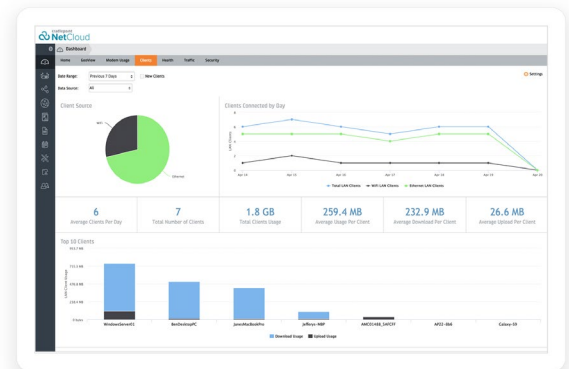
Cellular Performance: Results do not reflect performance of the cellular wireless modem nor wireless operator networks.

Key Software Capabilities

Cradlepoint NetCloud Service for SOHO with the E100 series router provides everything needed to connect the remote worker to their corporate applications and services they need most from virtually any location. The NetCloud Service includes cloud-based management for optimizing routing, VPN, SD-WAN, and security capabilities. The cloud capabilities include defining and applying policies, at-a-glance status insights, reports, troubleshooting, and analytics dashboards. The service includes a warranty for as long as there is an active subscription on the router, online training, live and online support, and all software and firmware updates.

Deployment Capabilities

Zero-touch deployment features allow pre-configured and pre-activated equipment to arrive on location so the employee is able to power up the E100 router, locate the best cellular connection path, and instantly setup the pre-established office parameters through the NetCloud Service, upon authentication.

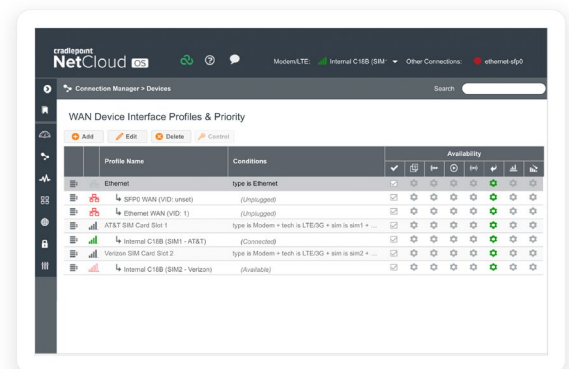


Security Services

NetCloud Service includes Unified Edge security features and options to optimize the E100 to meet and scale to the security needs of distributed environments. The service includes stateful zone-based and application-aware firewall, unified threat management, and authenticated wireless connection that is fully isolated from the surrounding networks.

Cloud Services

NetCloud Manager delivers true zero-touch deployment with the ability to define and deliver policy across entire groups of endpoints. Users can create a cloud-orchestrated hub and spoke VPN network and gain insights and analytics required for rapid troubleshooting and diagnostic workflows.



Hardware Specifications

The following features are delivered through the hardware.

INTERFACES	
Modem:	Embedded C4D modem — 2 x SMA cellular antenna connectors
Ethernet:	5 x GbE RJ45 (LAN/WAN switchable)
Wi-Fi:	Dual-radio, dual-band, concurrent operation (2.4 GHz and 5 GHz) — 2x2 MU-MIMO 802.11ac Wi-Fi 5 — 300 Mbps (2.4 GHz) and 867 Mbps (5 GHz) — Internal 2x2 antenna — WPA/WPA2/WPA3 Personal, WPA2/WPA3 Enterprise, Open — 802.11k, 802.11v
Expansion:	1 x USB 2.0 Type A (output: 5V, 500mA, 2.5W)
GNSS/GPS:	1 x SMA GNSS antenna connector
ENVIRONMENTAL	
Temperature:	Operating: 0 °C to 40 °C (32 °F to 104 °F) Storage: -20 °C to 70 °C (-4 °F to 158 °F)
Humidity:	Operating: 10% to 90% Storage: 5% to 95%
POWER	
Power Required:	Powered by external DC power supply, 100-240 VAC input, 12 VDC 2A output (included)
Power Backup:	Up to 2 optional backup batteries
PHYSICAL	
Size:	5.3 x 10.6 x 1.9 in (135 x 270 x 48 mm)
Weight:	1 lb 8 oz (.68 kg)

CERTIFICATIONS	
Safety:	UL/CUL, CB Scheme, EN60950-1, EN 62368
Materials:	RoHS, California Prop 65
WI-FI POWER	
FCC:	2.4 GHz: 29.4 dBm EIRP 5150–5250 MHz: 29.85 dBm EIRP 5745–5850 MHz: 29.91 dBm EIRP
IC:	2.4 GHz: 29.4 dBm EIRP 5150–5250 MHz: 25.46 dBm EIRP 5745–5850 MHz: 29.91 dBm EIRP
LEDs	
Refer to the E100 SOHO Router Quick Start Guide	
BATTERY (OPTIONAL)	
Size:	4.7 x 3.2 x 1.0 in (120.5 x 81 x 24.5 mm)
Weight:	12.2 oz (.35 kg)
Chemistry:	Lithium-ion
Capacity:	7800mAh
Voltage:	Nominal 7.2V, Max 8.4V
Estimated Runtime:	Single Battery: Up to 8 hours Dual Batteries: Up to 16 hours

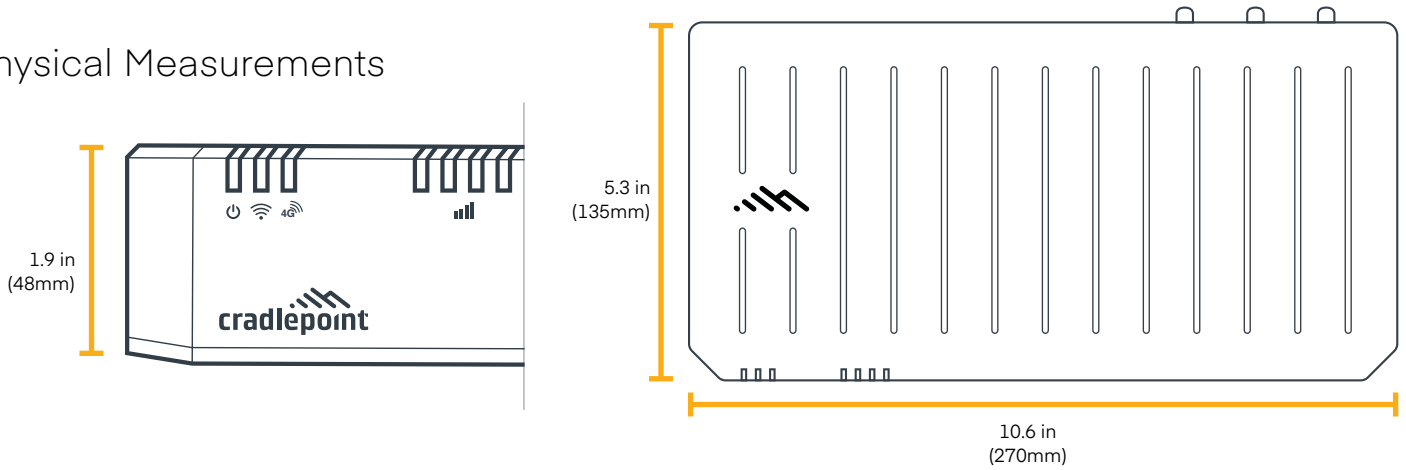
Enterprise-Class Modem Specifications

SPECIFICATION	E100-C4D
Technology:	Cat 4 LTE (3GPP Rel. 11) — Dual SIM slots, mini 2FF form factor — SIM-based auto-carrier selection
Fallback:	WCDMA/UMTS/HSPA+
Carrier Aggregation:	N/A
Peak Downlink Rates:	LTE: 150 Mbps WCDMA: 42.2 Mbps
Peak Uplink Rates:	LTE 50 Mbps WCDMA: 5.76 Mbps
MIMO:	2x2 MIMO
QAM:	64
LTE Bands:	LTE FDD — B2, B4, B5, B12, B13, B14, B66, B71
WCDMA Bands:	B2, B4, B5
Power:	LTE 23 dBm ± 1; HSPA+ 23 dBm ± 1 (typical conducted)
Antennas:	SMA female connectors, external 600 MHz - 6 GHz cellular paddle antennas (qty 2, included)
GNSS/GPS:	Passive GNSS — GPS, GLONASS, BeiDou, Galileo
SMS:	Yes
Regulatory:	FCC, IC
Telecom:	PTCRB
Required Carrier Certifications*:	AT&T, Verizon

* Cellular carriers and operators throughout the world may only require telecom industry certifications, like PTCRB or GCF, to operate on their network. Some carriers require additional testing and approval, beyond telecom certifications. A carrier listed in the approvals section means Cradlepoint completed additional testing and acquired technical approval for that given carrier. Any carrier not listed may not require additional testing or approval beyond telecom industry certifications to operate on their network.

Hardware

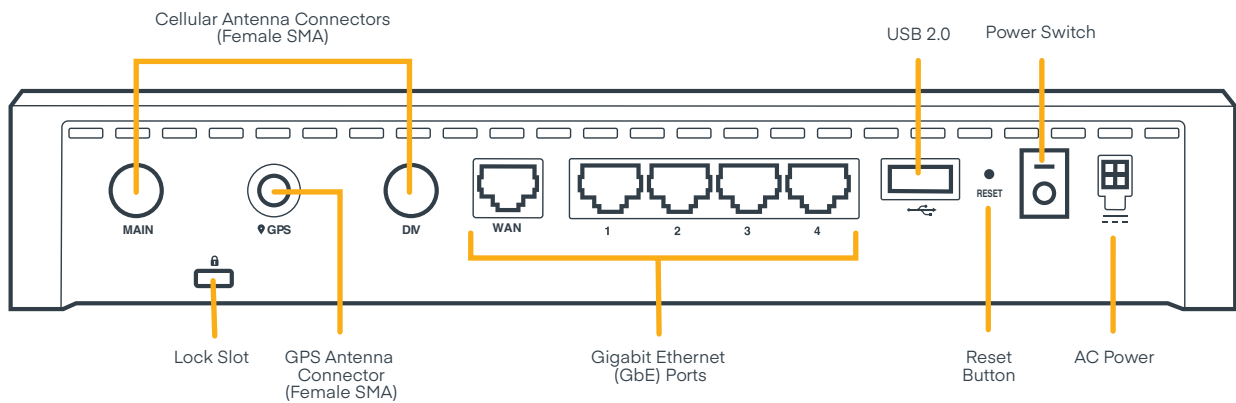
Physical Measurements



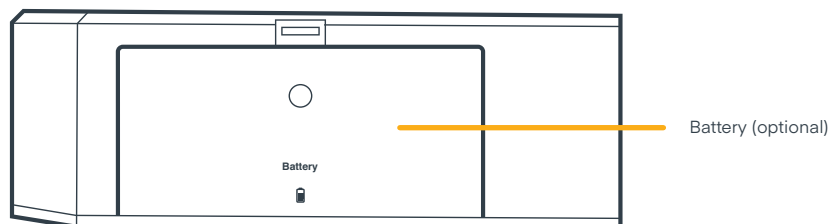
Front View



Back View



Side View



Ordering Guide

NetCloud Branch Essentials packages and plans contain all the features and capabilities required for small remote branch applications. Essentials Packages include 24x7 support (phone support: 24 hour weekdays with emergency response on weekends, web: 24x7, chat: 24x5) and a limited lifetime warranty.

See additional details of what is included in the Essential NetCloud software: <https://cradlepoint.com/products/netcloud-service/>

For more details on the E100 series of routers, included with the NetCloud Branch Packages, see below.

NetCloud Packages and Plans

REGION	DESCRIPTION	PART NUMBER
North America: U.S. & Canada	NetCloud SOHO Branch Essentials Plan, Advanced Plan, and E100 router with Wi-Fi (150 Mbps modem), North America	BHAX-0100C4D-NN
	NetCloud SOHO Branch Essentials Plan, Advanced Plan, and E100 router with Wi-Fi (150 Mbps modem) with Verizon SIM inserted, North America	BHBx-0100C4D-VN
	NetCloud SOHO Branch Essentials Plan, Advanced Plan, and E100 router with Wi-Fi (150 Mbps modem) with AT&T SIM inserted, North America	BHBx-0100C4D-AN
	NetCloud SOHO Branch Essentials Plan, Advanced Plan, and E100 router with Wi-Fi (150 Mbps modem) with T-Mobile SIM inserted, North America	BHBx-0100C4D-TN
Renewal:	1-yr Renewal NetCloud SOHO Branch Essentials Plan and Advanced Plan	BHA1-NCEA-R
	3-yr Renewal NetCloud SOHO Branch Essentials Plan and Advanced Plan	BHA3-NCEA-R
	5-yr Renewal NetCloud SOHO Branch Essentials Plan and Advanced Plan	BHA5-NCEA-R

x = 3, or 5 years

Accessories

INCLUDED	PART NUMBER
Power Supply, 12V, 2A, -20° C to 60° C, 2x2, 2M (North America)	170716-000
Cellular Antenna, Charcoal, 600 MHz - 6 GHz, SMA, 152mm (Qty. 2)	170801-000
Wall Mount Screw Pack	N/A
Rubber Feet for Desktop Mounting	N/A
OPTIONAL	PART NUMBER
Power Supply, 12V, 2A, -20° C to 60° C, 2x2, 2M (North America)	170716-000
Single Battery Pack for E100 Router	170848-000

Support & Warranty

The E100 is only sold as a component of NetCloud Branch Packages.

- NetCloud Packages include support for the full subscription term.
- All Cradlepoint hardware products are covered by a limited lifetime warranty for as long as they have a subscription license to an active NetCloud Service Plan.