

Data Sheet

E3000 Series Enterprise Router

2022 - 12 - 19

The Cradlepoint NetCloud for Branch with E3000 Series Enterprise Router is suited for fixed offices, healthcare, financial services and retail locations, ideally when combined with need for security services at scale with performance. The all-in-one form factor includes full-featured routing, security, switching with PoE ports and Wi-Fi, making it easy to connect branches to the Internet and critical applications without the need for extra hardware or complicated configurations. And the embedded LTE or 5G modem means that connectivity is always available from day one without waiting for a wired connection.

Ideal for Wireless WAN

For an all wireless WAN, the E3000 Series Router offers Gigabit LTE or 5G NR1 performance, which can support the throughput and service needs of an enterprise branch office or store with the ability to add a second LTE or 5G connection for increased available bandwidth and reliability. For organizations moving to a Wireless WAN, the E3000 Series Router offers the ability to pair with a wired link and use LTE or 5G as a failover connection or a primary connection.

5G Performance Embedded or Optimized

The E3000 Enterprise Branch Router offers 5G performance in two form factors. As a router with embedded 5G, the platform ships standard with the modem as well as a second slot for dual modem capabilities. As a 5G-optimized LTE router, it has the ability to act as a controller for a Cradlepoint 5G Wideband Adapter so that the modem can be placed for optimal signal coverage. The unique capability of Cradlepoint to operate the adapter in captive mode means that the two separate, Ethernet-connected appliances can be managed as a single entity. The two form factors ensure 5G performance in the manner that best suits the deployment needs.

Notable Features

- Gain agility through an embedded Cat 18 LTE or 5G NR modem for fast day-1 or primary connectivity.
- Terminate a primary wired broadband link with LTE or 5G as failover for highly resilient hybrid connectivity.
- Enable larger branch locations needing security and connections to cloud-based applications.
- Integrate into your existing network with standards-based dynamic routing and VPN tunnel support.
- Define policies through centralized, cloud-based management for easy deployment at scale.
- Add a second cellular modem for dual LTE or 5G connectivity
- Add hardware redundancy by pairing mirrored routers with VRRP to optimize uptime.



[Product Page](#)



[NetCloud Service](#)



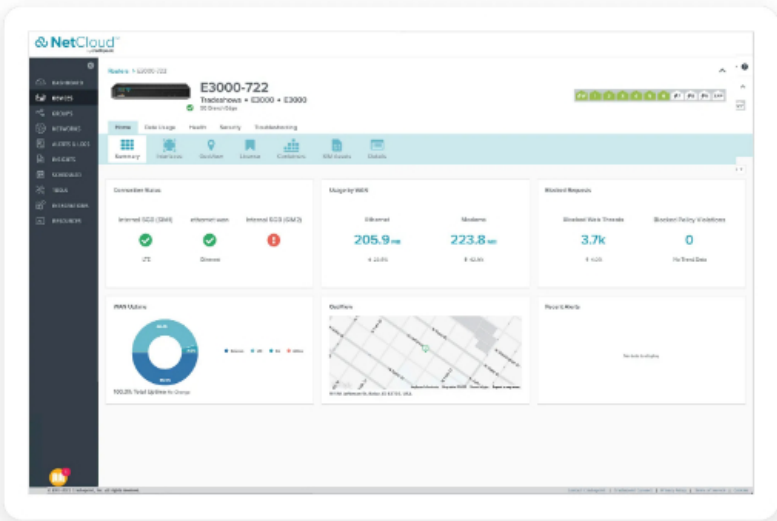
[Quick Start Guide](#)

Key Software Capabilities

The Cradlepoint NetCloud for Branch with E3000 Series Router provides everything needed to unlock the power of LTE or 5G at the network edge and connect users and IoT devices to critical applications and services. NetCloud includes routing, VPN, SD-WAN, and security capabilities for robust, enterprise-class performance. Cloud-based management designed for simplification, insights and scale includes group policy definition, 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.

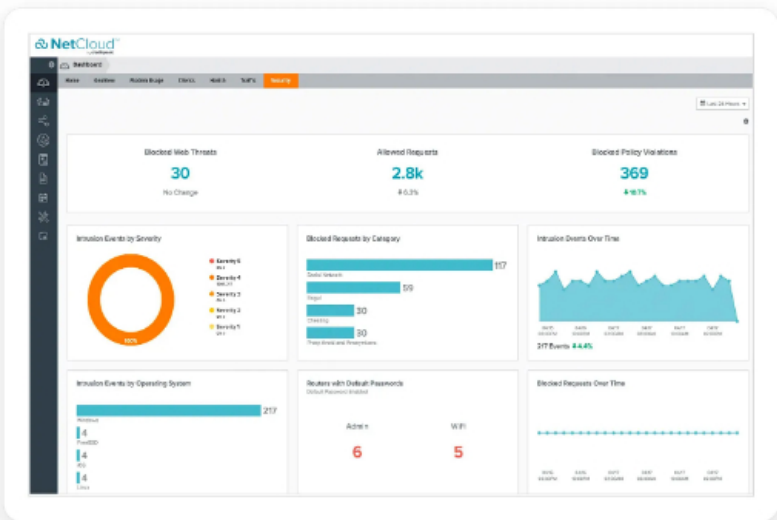
Router Services

The next generation hardware has the processing power to handle demanding routerdelivered services, dynamic routing protocols, and application aware traffic steering, supported with our exclusive NetCloud Essentials + Advanced software package.



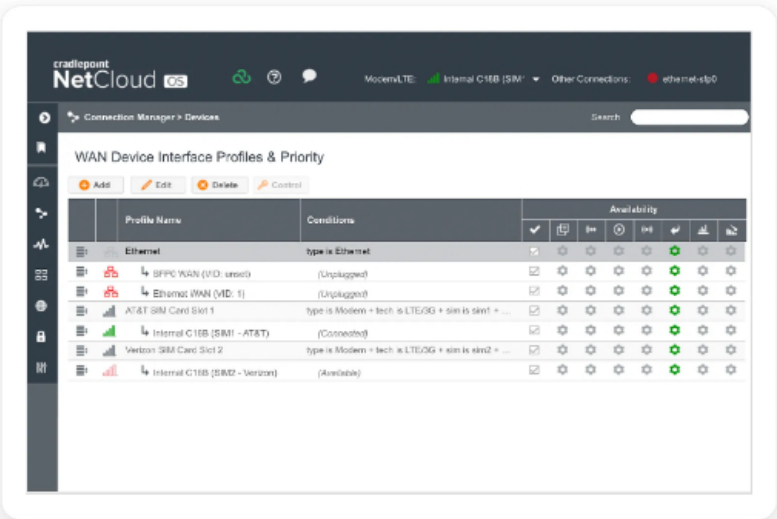
Security Services

NetCloud Essentials + Advanced packages include security features and options, such as stateful zone-based firewall, intrusion prevention, and threat protection, to optimize the E3000 Series Router to meet the evolving security needs of distributed environments. Additional security add-ons from leading technology partners make a rich security stack manageable from NetCloud.



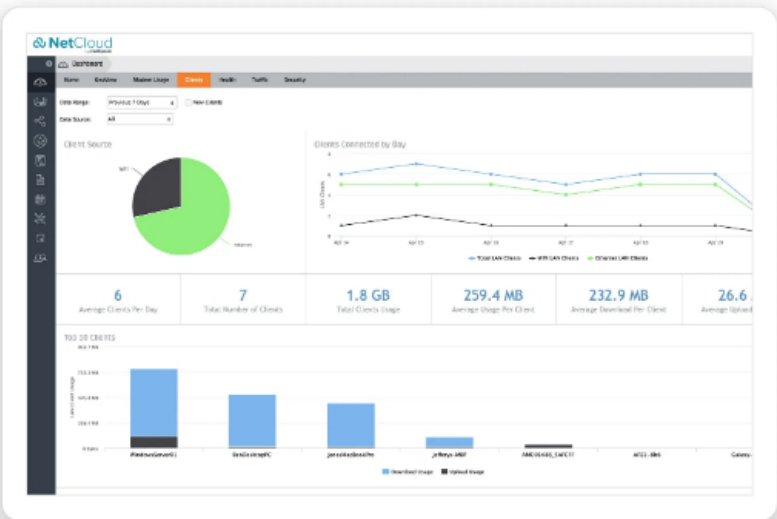
Connection Manager

Connection Manager provides the ability to manage all WAN connections types, both wireless and wired, from a single software-defined policy. Our custom-built modem software ensures users establish Wireless WAN connectivity faster while maintaining the highest level of resiliency.



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 cloudorchestrated 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:

One of the following:

- Embedded 5GB low/mid-band mode with 4 x SMA cellular antenna connectors
- Embedded C18B mode with 4 x SMA cellular antenna connectors

Optional dual modem:

- Modular MC400 Modem

Ethernet:

- 9 x GbE RJ45 (LAN/WAN switchable)
- 1 x 2.5GbE RJ45 (LAN/WAN switchable)
- 1 x 10GbE SFP+ (LAN/WAN switchable)
 - SFP: Finisar FTLF8519P3BNL, FTLF1318P3BTL
 - SFP+: Finisar FTLX8574D3BCL, FTLX1475D3BCL, FCBG110SD1Cxx

PoE:

4 x 802.3bt PoE Type 3/4 (up to 90 W per port)

- 140 W total PoE power budget

Wi-Fi:

Dual-radio, dual-band, concurrent operation (2.4 GHz and 5 GHz)

- 4x4 MU-MIMO 802.11ax Wi-Fi 6 with DFS
- 1,148 Mbps (2.4 GHz) and 2,400 Mbps (5 GHz)
- External 4x4 antennas
- Global Optimized Wi-Fi
- WPA/WPA2/WPA3 Personal, WPA2/WPA3 Enterprise, Open
- 802.11k, 802.11r, 802.11v

Expansion / Console:

- 1 x MC400 Modular Modem Slot (Peak throughput: 1 Gbps)
- 1 x USB 2.0 Type A (Output: 5 V, 500 mA, 2.5 W)
- 1 x Expansion Slot
 - MC20BT Bluetooth® wireless technology Low Energy module
- 1 x RJ45 Console

GNSS/GPS:

1 x SMA GNSS antenna connector (C18B modem only)

ENVIRONMENTAL

Temperature:

- Operating: 0 °C to 50 °C (32 °F to 122 °F)
- Storage: -20 °C to 85 °C (-4 °F to 185 °F)

Humidity:

- Operating: 10% to 90%
- Storage: 5% to 95%

POWER

Required:	Powered by external DC power supply, 100-240 VAC input, 54 VDC 3.34 A output (included)
Consumption:	<ul style="list-style-type: none"> — Idle: 17 W — Typical: 19 W — Heavy: 24 W
PHYSICAL	
Size:	160 x 320 x 44 mm (6.3 x 12.6 x 1.7 in)
Weight:	1.98 kg (4 lb 6 oz)
CERTIFICATIONS	
Safety:	UL/cUL, CB Scheme, EN 62368-1
Materials:	WEEE, RoHS, REACH, California Prop 65
Security:	FIPS 140-3 Level 1 Implementation Under Test (E3000 FIPS models only)
WI-FI POWER	
FCC:	<ul style="list-style-type: none"> — 2.4 GHz: 26.22 dBm Conducted — 5150–5250 MHz: 28.63 dBm Conducted — 5725–5850 MHz: 28.65 dBm Conducted
IC:	<ul style="list-style-type: none"> — 2.4 GHz: 26.22 dBm Conducted — 5150–5250 MHz: 21.70 dBm Conducted — 5725–5850 MHz: 28.65 dBm Conducted
PERFORMANCE	
Stateful Firewall Throughput:	2 Gbps
IPS Throughput:	1.5 Gbps
Application Aware Services & Analytics:	1.5 Gbps
IPSec VPN Throughput:	400 Mbps
Concurrent VPN Tunnels:	20
Concurrent Sessions (TCP):	130,000
Typical Client Count:	100
LEDs	
Refer to the E3000 Series Enterprise Branch Router Quick Start Guide .	

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

Results do not reflect performance of the cellular wireless operator networks.

Enterprise-Class Modem Specifications

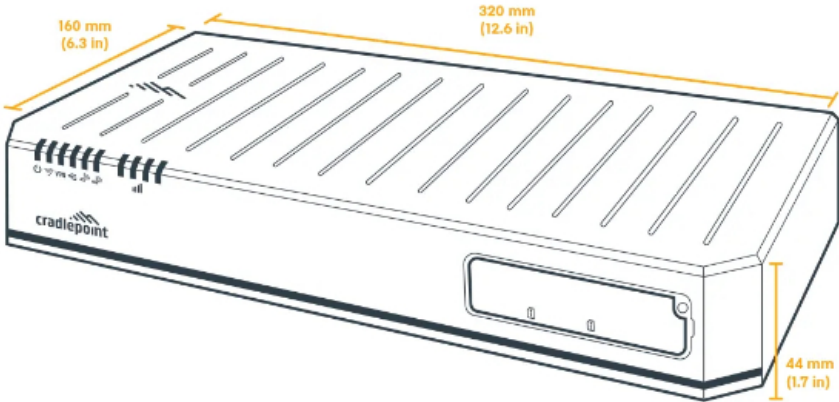
SPECIFICATION	E3000-C18B	E3000-5GB
Technology:	Cat 18 LTE Advanced Pro (3GPP Rel. 12)	5G NR (low/mid-band FR1) and 4G LTE Category 20 LTE Advanced Pro with Dual Connectivity
	<ul style="list-style-type: none"> — Dual SIM slots, 2FF form factor — SIM-based auto-carrier selection 	<ul style="list-style-type: none"> — Dual SIM slots, 2FF form factor

3G:	WCDMA/UMTS/HSPA+	WCDMA/UMTS/HSPA+
Carrier Aggregation:	Up to 5 CA downlink, 2 CA uplink Refer to the Modem Carrier Aggregations article.	LTE only; up to 7 CA downlink, 2 CA uplink ENDC 5G + LTE; downlink and uplink supported Refer to the Modem Carrier Aggregations article.
Peak Downlink Rates:	<ul style="list-style-type: none"> — LTE: 1.2 Gbps — WCDMA: 42.2 Mbps 	Up to 4.14 Gbps — based on 20 Layers LTE + TDD (100 MHz BW, 256 QAM, 4X4)
Peak Uplink Rates:	<ul style="list-style-type: none"> — LTE 150 Mbps — WCDMA: 5.76 Mbps 	Up to 660 Mbps — based on 2 Layers LTE + TDD (100 MHz BW, 256 QAM, SISO)
MIMO:	4x4 MIMO	4x4 MIMO
Modulation:	<ul style="list-style-type: none"> — Up to 256 QAM DL — Up to 64 QAM UL 	<ul style="list-style-type: none"> — Up to 256 QAM DL — Up to 64 QAM UL
4G/LTE Bands:	B1, B2, B3, B4, B5, B7, B8, B12, B13, B14, B17, B18, B19, B20, B25, B26, B28, B29, B30, B32, B48, B66, B71	B1, B2, B3, B4, B5, B7, B8, B12, B13, B14, B18, B19, B20, B21, B25, B26, B28, B29, B30, B32, B34, B38, B39, B40, B41, B42, B43, B46, B48, B66, B71
5G NR Bands:	N/A	n1, n2, n3, n5, n7, n8, n12, n20, n25, n28, n38, n40, n41, n48, n66, n71, n77, n78, n79
3G Bands:	B1, B2, B4, B5, B8, B19	B1, B2, B3, B4, B5, B6, B8, B9, B19
Power:	<ul style="list-style-type: none"> — LTE 23 dBm ± 1 — DC-HSPA+ 23 dBm ± 1 (typical conducted) 	<ul style="list-style-type: none"> — LTE only; 23 dBm ± 1 (typical conducted) — ENDC 5G + LTE; 20 dBm ± 1 (typical conducted)
Antennas:	SMA female connectors, external 600 MHz - 6 GHz cellular paddle antennas (Qty 4, included)	SMA female connectors, external 600 MHz - 6 GHz cellular paddle antennas (Qty 4, included)
GNSS/GPS:	Active GNSS <ul style="list-style-type: none"> — GPS, GLONASS, BeiDou, Galileo — DC voltage bias supplied (typical 3.1 V) 	Passive GNSS (multiplex with DIV/MIMO2 antenna ports)
SMS:	Yes	Yes
Regulatory:	FCC (U.S.), IC (Canada), CE (EU), RCM (AU/NZ)	FCC (U.S.), IC (Canada), CE (EU), RCM (AU/NZ)
Network Operator Standards:	PTCRB (U.S., Canada), GCF (Worldwide)	PTCRB (U.S., Canada), GCF (Worldwide)
Network Operator Certifications:	AT&T, Verizon, Telstra (Cat 16) [†]	AT&T, EE, T-Mobile, Verizon [†]
Public Safety Network Certifications:	FirstNet Trusted™, Verizon Frontline	FirstNet Trusted™, T-Mobile Connecting Heroes, Verizon Frontline
Private Cellular Network:	Yes, includes FCC Part 96 (CBRS Band 48)	Yes, includes FCC Part 96 (CBRS Band 48)

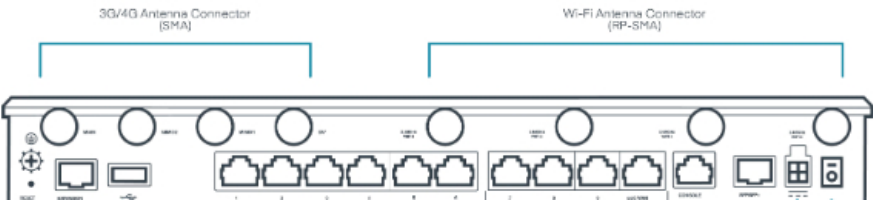
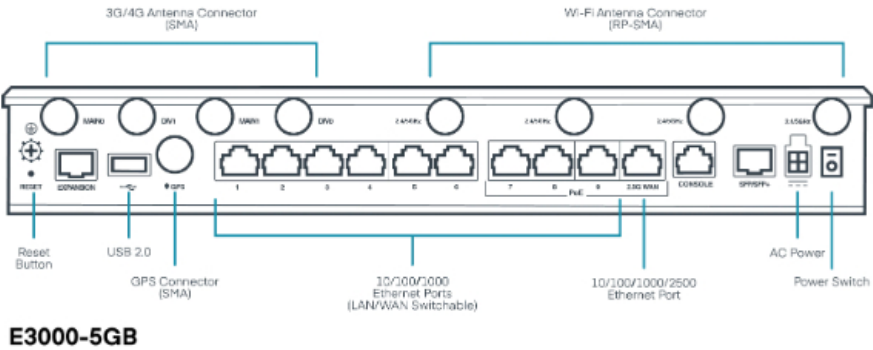
[†] Cellular carriers and operators throughout the world may only require telecom industry certifications, like PTCRB or GCF, to operate on their network. Some carriers require

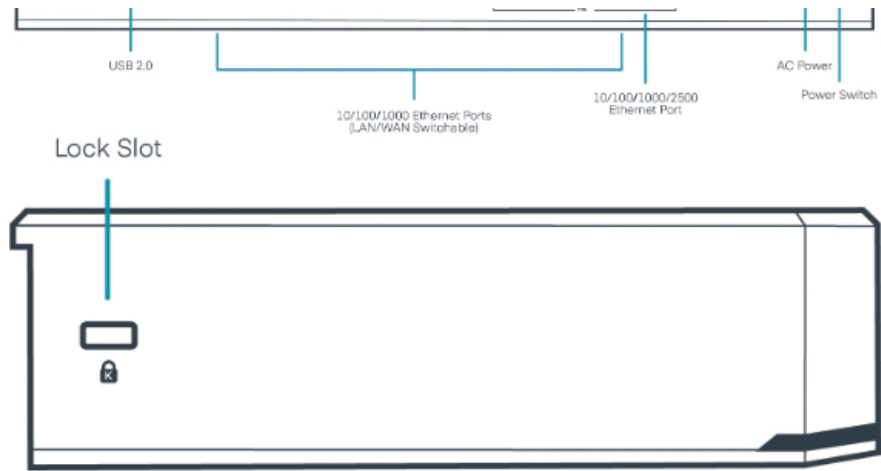
additional testing and approval, beyond telecom certifications, to operate on their network. A carrier listed in the approvals section means Cradlepoint completed additional testing and acquired technical approval for that given carrier. Any carrier not listed may not require additional testing or approval beyond telecom industry certifications to operate on their network.

Physical Measurements & Features



Features





SIM Card Info



Ordering Guide

NetCloud Enterprise Branch Essentials packages and plans contain all the features and capabilities required for small to mid-sized 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. For additional capabilities, a **NetCloud Enterprise Branch Advanced Plan** can be added to the NetCloud Enterprise Branch Essentials Package at any time. See additional details of what is included in the Essential and Advanced NetCloud software: cradlepoint.com/netcloud-service

NetCloud Enterprise Branch Packages for the E3000 Series Router

REGION	MODEM	BRANCH PACKAGE PLANS	PART NUMBER
The Americas: U.S. & Canada	Cat 18 (1200 Mbps) with Wi-Fi	Essentials	BF0x-3000C18B-GN
		Essentials + Advanced	BFAx-3000C18B-GN
	5GB with Wi-Fi	Essentials	BF0x-30005GB-GN
		Essentials + Advanced	BFAx-30005GB-GN
The Americas: Mexico	Cat 18 (1200 Mbps) with Wi-Fi	Essentials + Advanced	BFAx-3000C18B-MX
The Americas: U.S., Canada & Mexico		FIPS — Essentials + Advanced	BFAx-NCESSEF
		FIPS — Renewal Essentials + Advanced	BFAx-NCESSEF-R
U.S. Federal Government	Cat 18 (1200 Mbps)	TAA Compliant NC — Essentials	TAA-BF0y-

	with Wi-Fi	TAA Compliant NC — Essentials + Advanced	3000C18B-GN TAA-BFAy- 3000C18B-GN
	5GB with Wi-Fi	TAA Compliant NC — Essentials TAA Compliant NC — Essentials + Advanced	TAA-BF0y-30005GB- GN TAA-BFAy-30005GB- GN