

Data Sheet

Ericsson Cradlepoint E100

2024 - 11 - 15

The Ericsson Cradlepoint E100 enterprise router provides small footprint locations with the same networking, optimization, security, and ease of management that supports larger locations. The all-in-one endpoint includes full-featured routing, switching, and Wi-Fi, making it easy to connect and maintain connectivity to the internet for supporting crucial business applications. Additional capabilities for zero trust security and SD-WAN are available through NetCloud Exchange to provide confidence in connecting and securing peripheral devices such as IoT and point of sale (PoS). The embedded 5G or LTE modem means that reliable, connectivity is always available from day one without waiting for a wired connection.

Ideal for Small Branch Wireless WAN

For organizations requiring a Wireless WAN in small offices, the E100 offers the ability to pair 5G or LTE with a wired link and use a cellular link as a failover connection, hybrid WAN or a primary connection. The E100 combines this reliable routing with integrated switching and Wi-Fi to securely connect local devices for an all-in-one network. Combined with the scalable NetCloud, which makes managing cellular networks intuitive and insightful.

5G, SD-WAN, and Security Integration

The E100 router adds a 5G modem with the latest 5G standards to offer agile and reliable connections on an essential WAN infrastructure. Cellular intelligence and SD-WAN make it easy to deploy 5G-enabled networks while optimizing both cellular and wired traffic to enhance application performance. Security postures can be reinforced, and attack surfaces minimized with zero trust privileged access, protected IP addresses, detailed security policies and consolidated authentication usage.

Additionally, the E100 router can serve as the user equipment router for private cellular networks that provide reliable local area network connectivity where wireless LAN fails to meet the network needs due to large areas or excessive congestion.

Notable Benefits

- Connect to the internet or applications anywhere with all-wireless 5G using the latest standards or LTE connectivity.
- Open small offices, pop-ups and temporary locations without compromising security or reliability with a secure all-in-one design and compact form factor.
- Maximize uptime with both onboard failover from wired to wireless as well as optional battery backup in case of a power failure.
- Gain confidence in deploying communications, IoT and point of sale (POS) devices in small offices - much like what's expected in larger offices with 5G SASE.
- Reduce network attack surface, build encrypted tunnels, and incorporate zero trust principles with Secure Connect and Zero Trust Network Access.
- 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.



Key Software Capabilities

Ericsson NetCloud Service for small branch provides everything needed to connect the small offices to corporate applications and services from virtually any location. The Ericsson NetCloud Service includes cloud-based management for optimizing routing, VPN, traffic steering, 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.

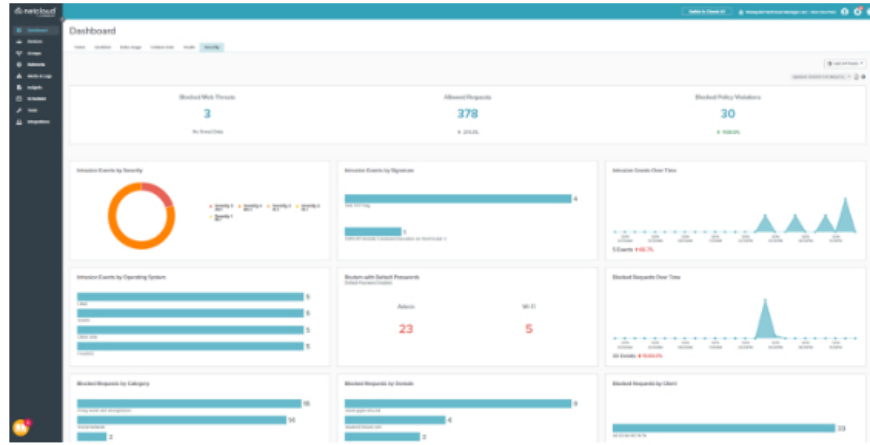
Deployment Capabilities

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



Security Services

Ericsson NetCloud Service includes integrated security features to optimize an E100 router to scale to the security needs of distributed environments. The service includes stateful zone-based and application-aware firewall, IDS/IPS, and authenticated wireless connection that is fully isolated from the surrounding networks.



Hardware Specifications

The following features are delivered through the hardware.

| INTERFACES | |
|---------------------|---|
| Modem: | One of the following: <ul style="list-style-type: none"> — Embedded 5G FR1 NSA/SA 3GPP release 16 and 4G LTE Category 19 modem, including 4 x SMA cellular antenna connectors — Embedded Cat 4 LTE modem, including 2 x SMA cellular antenna connectors — Embedded Cat 7 LTE modem, including 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) <ul style="list-style-type: none"> — 2x2 MU-MIMO 802.11ac Wi-Fi 5 with DFS — 300 Mbps (2.4 GHz) and 867 Mbps (5 GHz) — Up to 248 Wi-Fi connections (124 per radio - 2.4 GHz and 5 GHz) — Internal 2x2 antenna — WPA/WPA2/WPA3 Personal, WPA/WPA2/WPA3 Enterprise, Open — Wi-Fi Alliance Certified |
| Expansion: | 1 x USB 2.0 Type A (Output: 5 V, 500 mA, 2.5 W) |
| GNSS/GPS: | E100-5GC <ul style="list-style-type: none"> — Passive GNSS (muxed with external cellular antennas) E100-C4D and E100-C7C <ul style="list-style-type: none"> — 1 x SMA GNSS antenna connector |
| ENVIRONMENTAL | |
| Temperature: | <ul style="list-style-type: none"> — Operating: 0 °C to 40 °C (32 °F to 104 °F) — Storage: -20 °C to 70 °C (-4 °F to 158 °F) |

| | |
|-------------------------|---|
| Humidity: | <ul style="list-style-type: none"> — Operating: 10% to 90% — Storage: 5% to 95% |
| POWER | |
| Required: | <p>External power supply (included)</p> <ul style="list-style-type: none"> — Input: 100-240 VAC 1 A — Output: 12 VDC 3 A |
| Backup: | <p>E100-5GC</p> <ul style="list-style-type: none"> — Up to 1 optional backup battery <p>E100-C4D and E100-C7C</p> <ul style="list-style-type: none"> — Up to 2 optional backup batteries |
| Consumption: | <p>E100-5GC</p> <ul style="list-style-type: none"> — Idle: 4 W — Idle Charging 1 Battery: 10 W — Typical Usage with Charging 1 Battery: 19.5 W — Heavy Usage with Charging 1 Battery: 22 W <p>E100-C4D and E100-C7C</p> <ul style="list-style-type: none"> — Idle: 4 W — Idle Charging 1 Battery: 10 W — Idle Charging 2 Batteries: 16 W — Typical Usage with Charging 2 Batteries: 18 W — Heavy Usage with Charging 2 Batteries: 20 W |
| PHYSICAL | |
| Size: | 135 × 270 × 48 mm (5.3 × 10.6 × 1.9 in) |
| Weight: | <p>E100-5GC</p> <ul style="list-style-type: none"> — .83 kg (1 lb 13 oz) <p>E100-C4D and E100-C7C</p> <ul style="list-style-type: none"> — .68 kg (1 lb 8 oz) |
| RELIABILITY | |
| Calculated MTBF: | <ul style="list-style-type: none"> — E100-5GC: 527,789 hours (Telcordia SR332 at 25 °C) — E100-C4D and E100-C7C: 673,341 hours (Telcordia SR332 at 25 °C) |
| CERTIFICATIONS | |

| | |
|--------------------------------------|--|
| Safety: | <ul style="list-style-type: none"> — UL/cUL 62368-1 — IEC 62368-1 — CB Scheme |
| Materials: | <ul style="list-style-type: none"> — California Prop 65 — REACH — RoHS — TSCA — WEEE |
| Security: | Secureboot |
| CLOUD SERVICES | |
| Service Plans: | NetCloud Service for Small Branch |
| Service Add-Ons: | NetCloud Exchange, NetCloud Advanced |
| Support: | NetCloud Packages include support for the full subscription term. |
| Warranty: | 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. |
| Device Management: | NetCloud Manager for the full subscription term. |
| Software Updates: | NetCloud Manager for the full subscription term. |
| WI-FI POWER | |
| FCC: | <ul style="list-style-type: none"> — 2412-2462 MHz (2.4 GHz): 29.4 dBm EIRP — 5150–5250 MHz (5 GHz band 1): 29.85 dBm EIRP — 5250-5350 MHz (5 GHz band 2a): 27.91 dBm EIRP — 5470-5725 MHz (5 GHz band 2c): 27.62 dBm EIRP — 5745–5850 MHz (5 GHz band 3): 29.91 dBm EIRP |
| IC: | <ul style="list-style-type: none"> — 2412-2462 MHz (2.4 GHz): 29.4 dBm EIRP — 5150–5250 MHz (5 GHz band 1): 25.46 dBm EIRP — 5250-5350 MHz (5 GHz band 2a): 22.94 dBm EIRP — 5470-5725 MHz (5 GHz band 2c): 27.59 dBm EIRP — 5745–5850 MHz (5 GHz band 3): 29.91 dBm EIRP |
| CE: | <p>E100-5GC</p> <ul style="list-style-type: none"> — 2412-2472 MHz (2.4 GHz): 19.94 dBm EIRP — 5180–5240 MHz (5 GHz band 1): 22.22 dBm EIRP — 5260-5320 MHz (5 GHz band 2a): 22.57 dBm EIRP — 5500-5700 MHz (5 GHz band 2c): 26.26 dBm EIRP <p>E100-C4D and E100-C7C</p> <ul style="list-style-type: none"> — N/A |
| PERFORMANCE[†] | |
| Stateful Firewall Throughput: | 850 Mbps |
| IPS Throughput: | 250 Mbps |

| | |
|--|--|
| Application Aware Services & Analytics: | 250 Mbps |
| IPSec VPN Throughput: | 40 Mbps |
| Concurrent VPN Tunnels: | 20 |
| Concurrent Sessions (TCP): | 32,000 |
| Typical Client Count: | 25 (up to 248 Wi-Fi connections ^{††}) |
| Layer 2 / Layer 3 VLANs: | Up to 64 |
| LEDs | |
| See the E100 Router Quick Start Guide or the E100-5GC Enterprise Router Quick Start Guide. | |
| E100 BATTERY (OPTIONAL) | |
| Size: | 120.5 x 81 x 24.5 mm (4.7 x 3.2 x 1.0 in) |
| Weight: | .35 kg (12.2 oz) |
| Chemistry: | Lithium-ion |
| Capacity: | 7800 mAh |
| Voltage: | <ul style="list-style-type: none"> — Nominal: 7.2 V — Maximum: 8.4 V |
| Estimated Runtime: | <p>E100-5GC</p> <ul style="list-style-type: none"> — Single Battery: Up to 8 hours <p>E100-C4D and E100-C7C</p> <ul style="list-style-type: none"> — Single Battery: Up to 8 hours — Dual Batteries: Up to 16 hours |

[†]Performance 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. Results do not reflect performance of the cellular wireless operator networks.

^{††}Wi-Fi connections refer only to client association with the Wi-Fi radios and do not reflect overall endpoint performance and scale.

Enterprise-Class Modem Specifications

| SPECIFICATION | E100-C4D |
|-----------------------------|---|
| Technology: | <p>Cat 4 LTE (3GPP Rel. 11)</p> <ul style="list-style-type: none"> — Dual SIM slots, 2FF form factor — SIM-based auto-carrier selection |
| 3G: | WCDMA/UMTS/HSPA+ |
| Carrier Aggregation: | N/A |
| Peak Download Rates: | <ul style="list-style-type: none"> — LTE: 150 Mbps — WCDMA: 42.2 Mbps |

| | |
|--|--|
| Peak Uplink Rates: | <ul style="list-style-type: none"> — LTE: 50 Mbps — WCDMA: 5.76 Mbps |
| MIMO: | 2x2 MIMO |
| Modulation: | C4D FR1 <ul style="list-style-type: none"> — Downlink: Up to 64 QAM — Uplink: Up to 64 QAM |
| 4G/LTE Bands: | FDD <ul style="list-style-type: none"> — B2 (1900), B4 (1700), B5 (850), B12 (700), B13 (700), B14 (700), B66 (1700), B71 (600) |
| 5G NR Bands: | N/A |
| 3G 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: | Active GNSS |
| SMS: | Yes |
| Regulatory: | FCC (U.S.), IC (Canada) |
| Network Operator Standards: | PTCRB (U.S., Canada) |
| GCF Global Operators: | https://www.globalcertificationforum.org/membership/gcf-members.html [†] |
| PTCRB North America Operators: | https://www.ptcrb.com/about/ |
| Network Operator Certifications: | AT&T, Verizon [†] |
| Public Safety Network Certifications: | FirstNet Trusted™ |
| Private Cellular Network: | N/A |

[†] 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.

| SPECIFICATION | E100-C7C |
|-----------------------------|--|
| Technology: | Cat 7 LTE (3GPP Rel. 11) <ul style="list-style-type: none"> — Dual SIM slots, 2FF form factor — SIM-based auto-carrier selection |
| 3G: | WCDMA/UMTS/HSPA+ |
| Carrier Aggregation: | Up to 2 x CA downlink, 2 x CA uplink See Understanding Carrier Aggregation. |
| Peak Downlink Rates: | <ul style="list-style-type: none"> — LTE: 300 Mbps — WCDMA: 42.2 Mbps |
| Peak Uplink Rates: | <ul style="list-style-type: none"> — LTE: 150 Mbps — WCDMA: 5.76 Mbps |

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|---------------------------------------|--|
| MIMO: | 2x2 MIMO |
| Modulation: | C7C FR1 <ul style="list-style-type: none"> — Downlink: Up to 64 QAM — Uplink: Up to 64 QAM |
| 4G/LTE Bands: | FDD <ul style="list-style-type: none"> — B2 (1900), B4 (1700), B5 (850), B7 (2600), B12 (700), B13 (700), B14 (700), B25 (1900), B26 (850), B66 (1700), B71 (600) TDD <ul style="list-style-type: none"> — B41 (2500), B42 (3500), B43 (3700), B48 (3500) |
| 5G NR Bands: | N/A |
| 3G Bands: | B2, B4, B5 |
| Power: | LTE 23 dBm ± 1, DC-HSPA+ 23 dBm ± 1 (typical conducted) |
| Antennas: | SMA female connectors, external 600 MHz - 6 GHz cellular paddle antennas (Qty 2, included) |
| GNSS/GPS: | Active GNSS |
| SMS: | Yes |
| Regulatory: | FCC (U.S.), IC (Canada) |
| Network Operator Standards: | PTCRB (U.S., Canada) |
| GCF Global Operators: | https://www.globalcertificationforum.org/membership/gcf-members.html [†] |
| PTCRB North America Operators: | https://www.ptcrb.com/about/ |
| Network Operator | AT&T, Verizon, Bell (pending) [†] |
| Certifications: | |
| Public Safety Network | FirstNet Capable™ |
| Certifications: | |
| Private Cellular Network: | Yes, includes FCC Part 96 (CBRS Band 48) |

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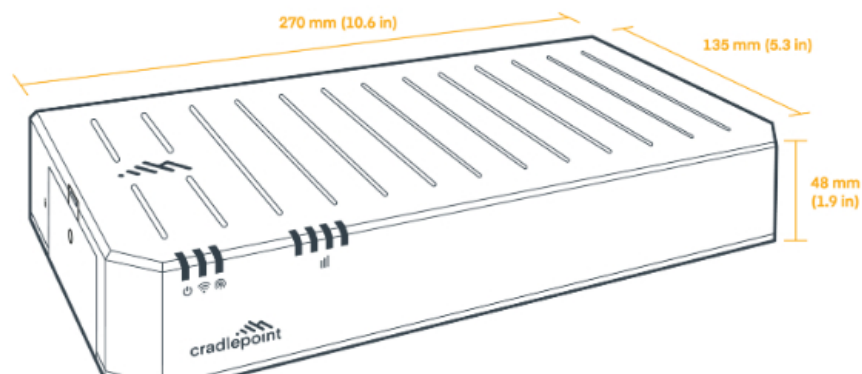
| SPECIFICATION | E100-5GC |
|--------------------|--|
| Technology: | 5G FR1 NSA/SA <ul style="list-style-type: none"> — LTE Advanced Pro Category 19 fallback — Dual SIM slots, 4FF form factor — 3GPP Release 16 |
| 3G: | UMTS/HSPA+ |

| | |
|-----------------------------|---|
| Carrier Aggregation: | <p>LTE Only</p> <ul style="list-style-type: none"> — Downlink: Up to 5CA — Uplink: Up to 2CA <p>LTE + 5G NR ENDC</p> <ul style="list-style-type: none"> — Downlink: Up to 4CA (LTE) + Up to 1CA (5G NR) — Uplink: Up to 2CA (LTE) + Up to 2CA (5G NR) <p>5G NR Only</p> <ul style="list-style-type: none"> — Downlink: Up to 2CA — Uplink: 1CA <p>See Understanding Carrier Aggregation.</p> |
| Peak Rates: | <p>NSA</p> <ul style="list-style-type: none"> — Downlink: Up to 3.4 Gbps — Uplink: Up to 550 Mbps <p>SA</p> <ul style="list-style-type: none"> — Downlink: Up to 2.4 Gbps — Uplink: Up to 450 Mbps <p>LTE</p> <ul style="list-style-type: none"> — Downlink: Up to 1.6 Gbps — Uplink: Up to 200 Mbps |
| MIMO: | 4x4 MIMO |
| Modulation: | <p>5GC FR1</p> <ul style="list-style-type: none"> — Downlink: Up to 256 QAM — Uplink: Up to 256 QAM |
| 4G/LTE Bands: | <p>FDD</p> <ul style="list-style-type: none"> — B1 (2100), B2 (1900), B3 (1800), B4 (1700), B5 (850), B7 (2600), B8 (900), B12 (700), B13 (700), B14 (700), B17 (700), B18 (850), B19 (850), B20 (800), B25 (1900), B26 (850), B28 (700), B29 (700), B30 (2300), B32 (1500), B66 (1700), B71 (600) <p>TDD</p> <ul style="list-style-type: none"> — B34 (2000), B38 (2600), B39 (1900), B40 (2300), B41 (2500), B42 (3500), B43 (3700), B46 (5200), B48 (3500) |
| 5G NR Bands: | <p>NSA and SA</p> <ul style="list-style-type: none"> — n1 (2100), n2 (1900), n3 (1800), n5 (850), n7 (2600), n8 (900), n12 (700), n13 (700), n14 (700), n18 (850), n20 (800), n25 (1900), n26 (850), n28 (700), n29 (700), n30 (2300), n38 (2600), n40 (2300), n41 (2500), n48 (3500), n66 (1700/2100), n70 (2000), n71 (600), n75 (1500), n76 (1500), n77 (3700), n78 (3500), n79 (4900) |

| | |
|--|---|
| 3G Bands: | B1, B2, B4, B5, B8, B19 |
| Power: | <p>LTE</p> <ul style="list-style-type: none"> — LTE bands: 23 dBm ± 2 (typical conducted) — LTE HPUE bands: 26 dBm ± 2 (typical conducted) <p>5G NR</p> <ul style="list-style-type: none"> — 5G NR bands: 23 dBm ± 2 (typical conducted) — 5G NR HPUE bands: 26 dBm ± 2 (typical conducted) |
| Antennas: | SMA female connectors, external 600 MHz - 6 GHz cellular paddle antennas (Qty 4, included) |
| GNSS/GPS: | <p>Passive GNSS (multiplex with antenna ports 2 and 4)</p> <ul style="list-style-type: none"> — GPS, GLONASS, BeiDou, Galileo, QZSS |
| SMS: | Yes |
| Regulatory: | FCC (U.S.), IC (Canada), CE (EU), RCM (AU/NZ), UKCA (UK) |
| Network Operator Standards: | PTCRB (U.S., Canada), GCF (Worldwide) |
| GCF Global Operators: | https://www.globalcertificationforum.org/membership/gcf-members.html † |
| PTCRB North America Operators: | https://www.ptcrb.com/about/ |
| Network Operator Certifications: | AT&T, T-Mobile, Verizon† |
| Public Safety Network Certifications: | N/A |
| Private Cellular Network: | Yes, includes FCC Part 96 (CBRS Band 48) |

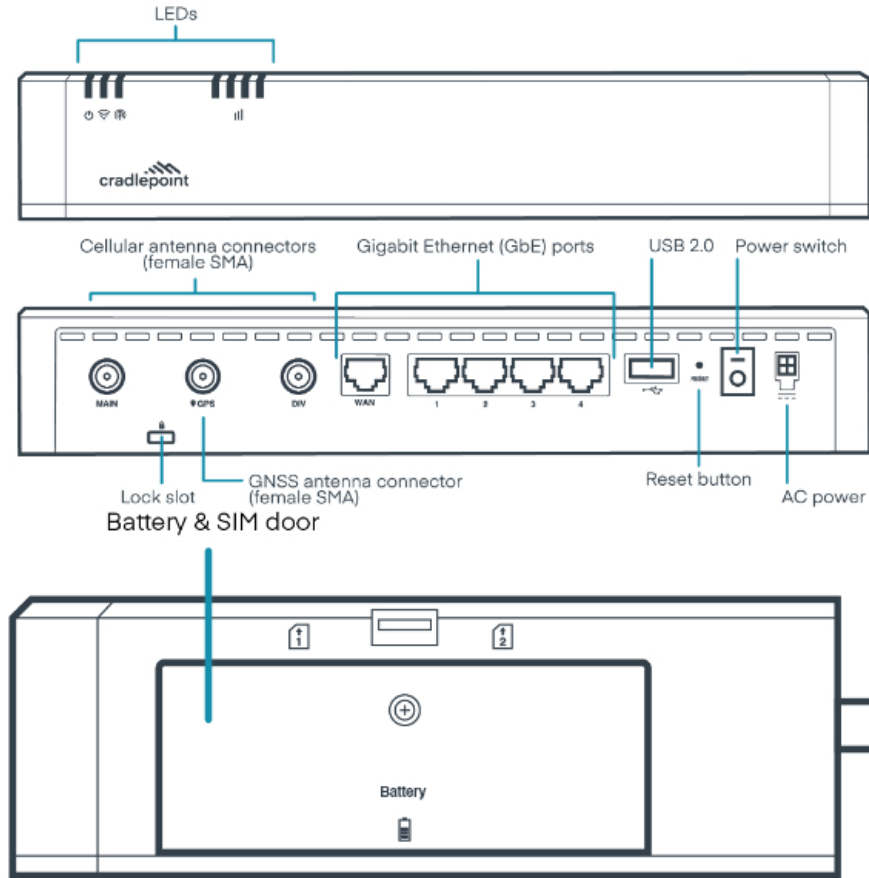
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Physical Measurements & Features

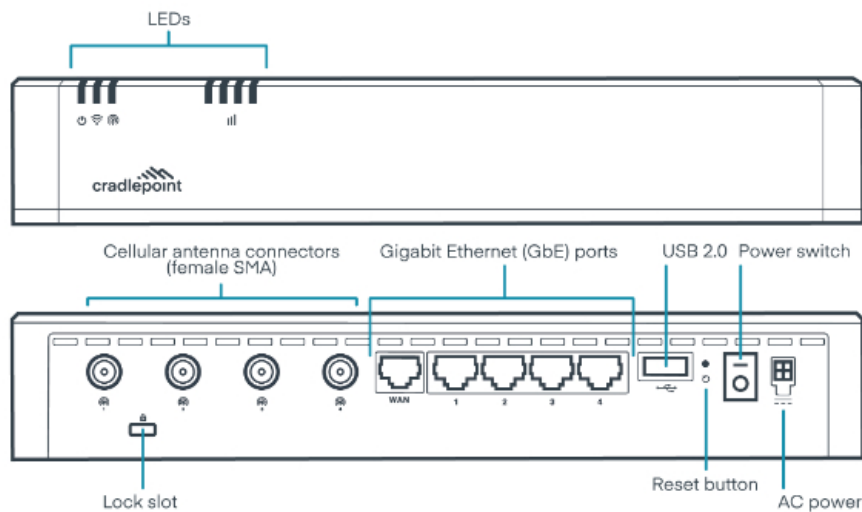


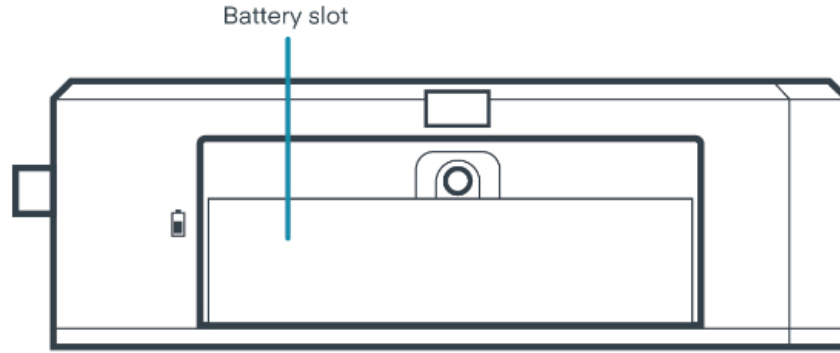


Features — E100-C4D/C7C

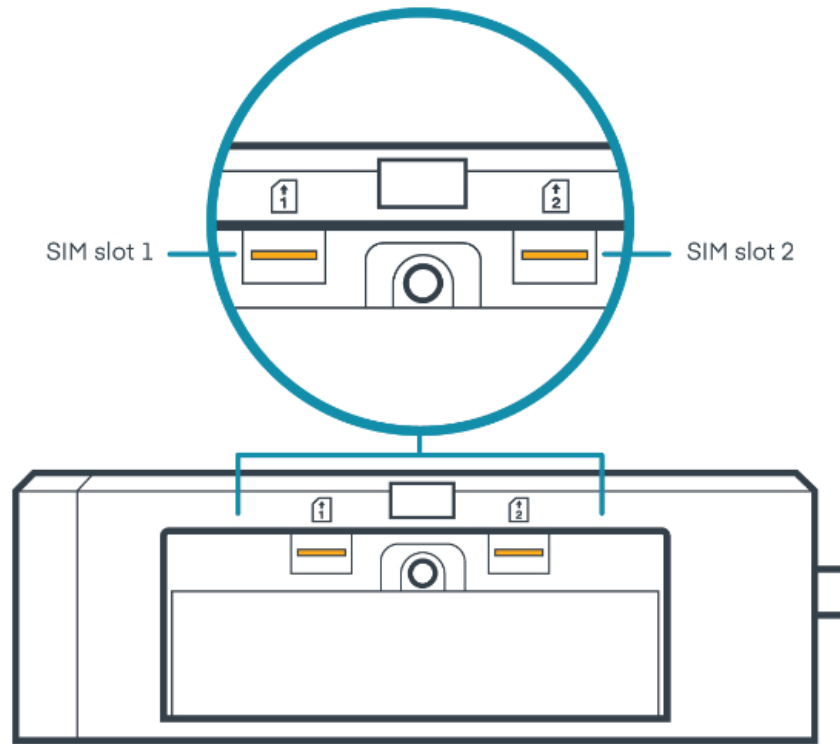


Features — E100-5GC





Battery door removed

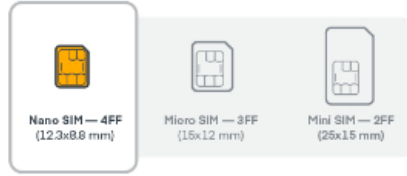


SIM door removed

SIM Card Info — E100-C4D/C7C



SIM Card Info — E100-5GC



Ordering Guide

Ericsson NetCloud Service Small Branch Essentials + Advanced packages and plans contain all the features and capabilities required for remote or virtual workers. Ericsson NetCloud 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, an **Ericsson NetCloud Service Small Branch Advanced plan** can be added to the Ericsson NetCloud Small Branch Essentials package at any time.

See additional details of what is included in the Ericsson NetCloud software: cradlepoint.com/netcloud-service

Ericsson NetCloud Small Branch Packages for the E100 Router

| REGION | MODEM | PACKAGE PLAN | PART NUMBER |
|--|--------------------------------|--|----------------------------|
| North America: U.S & Canada | 5G with Wi-Fi | Essentials | BK0x-01005GC-GN |
| | | Essentials + Advanced | BKAx-01005GC-GN |
| | Cat 7 (300 Mbps) with Wi-Fi | Essentials | BK0x-0100C7C-GN |
| | | Essentials + Advanced | BKAx-0100C7C-GN |
| United States: Federal Government | Cat 7 (300 Mbps) with Wi-Fi | Essentials + Advanced | TAA-BKAx-0100C7C-GN |
| Rest of World: Australia, European Union, New Zealand, & United Kingdom | 5G with Wi-Fi | Essentials | BK0x-01005GC-GM |
| | | Essentials + Advanced | BKAx-01005GC-GM |
| All Regions: | | Renewal | |
| | | — Advanced Upgrade (requires Essentials) | BK0x-NCADV BK0x-NCESS-R |
| | | — Essentials | BK0x-NCADV-R |
| | | — Advanced (requires Essentials) | BKAx-NCEA-R |
| | | — Essentials + Advanced | |

x = 1, 3, or 5 years

y = 3 or 5 years

Accessories

| INCLUDED | PART NUMBER |
|----------|-------------|
|----------|-------------|

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|---|--------------------|
| One of the following: | |
| — Power Supply, 12 VDC, 2X2 1.5 meters (North America) | 170716-001 |
| — Power Supply, 12 VDC, 2x2 1.5 meters (International) | 170717-000 |
| Cellular Antenna, Charcoal, 600 MHz - 6 GHz, SMA, 180 mm (Qty 2 or 4) | 170801-000 |
| Cable, Ethernet RJ45-to-RJ45, Black, 1.5 meters | 170725-000 |
| Small Accessories Kit | N/A |
| — SIM/battery door screws (Qty 2) | |
| — Rubber feet (Qty 4) | |
| OPTIONAL | PART NUMBER |
| Single Battery Pack for E100 Series Router | 170848-000 |
| UNITED STATES FEDERAL GOVERNMENT | PART NUMBER |
| Cellular Antenna, Charcoal, 600 MHz - 6 GHz, SMA, 180 mm | TAA-170801-000 |

Support & Warranty

The E100 router is only sold as a component of Ericsson NetCloud Service Small Branch packages.

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

More Information

Find the most up-to-date information at cradlepoint.com/e100