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# Data Sheet Ericsson Cradlepoint S400

2024 - 11 - 21

The Ericsson Cradlepoint S400 is a cloud managed, semi-ruggedized secure appliance and router for IoT networks. Offering connectivity through LTE plus wired and Wi-Fi options, the S400 is designed for light industrial, digital signage, and kiosk use cases. The S400 includes an Ericsson NetCloud Service Plan Secure IoT license, which provides management at scale, group policies, configurations and troubleshooting, plus connect and go zero trust security.

# Semi-Ruggedized IoT Solution

When coupled with the Ericsson NetCloud Secure IoT service plan, the S400 provides a compact, semi-ruggedized Cat 6 4G LTE router and security solution for connecting IoT devices at scale. With an IP30-rated housing built to withstand vibration and temperature extremes and designed for mounting on DIN rails, the S400 is ideal for use in light industrial applications such as SCADA, remote monitoring, smart city intelligent traffic control or in applications such as surveillance cameras, digital signs, and control sensors. With an extensive list of features, it can be confidently deployed in the field, in buildings, or in embedded systems to deliver complete visibility, security, and control of connected devices anywhere.

## Cloud-Managed IoT Solution — with Secure Connect Included

For organizations requiring robust connectivity for IoT networks — with installed networking endpoints numbering from a handful to many thousands — Ericsson's NetCloud Secure Services for IoT with the S400 provides a comprehensive cloud managed network solution with NetCloud SASE Secure Connect included. With this zero-trust security, any IoT device connected to the S400 is immediately hidden from public scans and from devices connected to other routers. Access policies are easily defined so IoT devices communicate only with their authorized resources on a leastprivilege basis. Ericsson's NetCloud-managed IoT endpoints can be rapidly deployed and easily scaled to accommodate the diverse requirements of organizations.

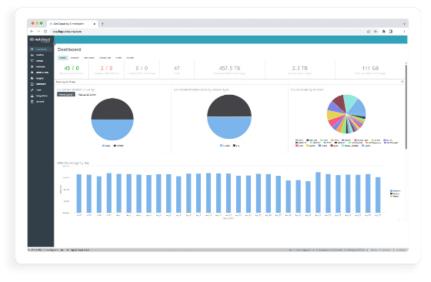
# Notable Features

- Build protected connections with zero trust, connect and go security, included as part of the subscription.
- Define policies through centralized, cloudbased management for easy deployment at scale.
- Gain fast, reliable connectivity with an embedded Cat 6 modem with dual SIM support.
- Expand working radius and IoT connectivity with 2.4GHz or 5GHz Wi-Fi 5, Wi-Fi 5.
- Provide a semi-ruggedized solution capable of wide temperature ranges and vibration.
- Utilize configurable GPIO ports and NetCloud integrations for IoT applications.
- Customize and extend NetCloud Service functionality with NetCloud SDK and API.
- Provide GNSS/GPS for asset tracking and portable IoT use cases.



#### **Key Software Capabilities**

NetCloud Secure Service for IoT includes the appropriate S400 software with powerful cloud management features for managing IoT at scale. The NetCloud Service includes cloud-based management for optimizing routing, zero trust connections, visibility dashboards and troubleshooting capabilities. The cloud capabilities include defining and applying policies, at-a-glance status insights, reports, and analytics dashboards. The service includes a warranty for as long as there is an active Secure IoT Essentials or Secure Essentials + Advanced subscription on the router, online training, live and online support, and all software and firmware updates.



# Security Services

Cradlepoint zero trust security networking, delivered through Secure Connect, protects the Ericsson Cradlepoint IoT routers and any connected devices through connect-and-go ease. IoT or other devices simply connect to the router with encrypted tunnels to build micro-segmented networks that are instantly hidden from internal and external sites. Access policies are easily defined to enable IoT devices to communicate only with their authorized resources or applications and nothing else. The simple and secure zero trust access, delivered through Zero Trust Network Access, also delivers authorized contractors and third parties secure remote access to IoT devices on the WAN for remote monitoring and maintenance.



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### **Extensibility and Integrations**

NetCloud Service and the S400 Series Router can access network data that third-party applications need to provide higher levels of insights and control. Leverage pre-built connections to partner applications or create custom connections across a variety of use cases using the NetCloud SDK or NetCloud API.

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### **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 cloud-orchestrated zero trust networks and gain insights and analytics required for rapid troubleshooting and diagnostic workflows.

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### Hardware Specifications

The following features are delivered through the hardware.

INTERFACES	
Modem:	Embedded Cat 6 LTE modem
	<ul> <li>2 x SMA cellular antenna connectors</li> </ul>
Ethernet:	1 x GbE RJ45 (LAN/WAN selectable)
Wi-Fi:	Single-radio, dual-band, non-concurrent operation (2.4 GHz or 5 GHz)
	— 1x1 MIMO 802.11ac Wi-Fi 5
	— 150 Mbps (2.4 GHz) and 433 Mbps (5 GHz)
	<ul> <li>1 x RP-SMA Wi-Fi antenna connector</li> </ul>
	<ul> <li>Global Optimized Wi-Fi &amp; International SDR</li> </ul>
	<ul> <li>WPA/WPA2/WPA3 Personal, WPA2/WPA3 Enterprise, Open</li> </ul>
	— 802.11k, 802.11v
	<ul> <li>Wi-Fi Alliance Certified</li> </ul>
Expansion:	<ul> <li>1 x USB 2.0 Type A (output: 5 V, 500 mA, 2.5 W)</li> </ul>
	<ul> <li>1 x Expansion module slot</li> </ul>
	<ul> <li>Serial DB-9, RS232 interface with hardware flow control</li> </ul>
	<ul> <li>Dual Fast Ethernet, 2 x FE RJ45 (LAN/WAN selectable)</li> </ul>
	<ul> <li>GPIO module, 20-pin (2 x 10) Molex Micro-Fit 3.0 connector</li> </ul>
GNSS/GPS:	Passive GNSS (multiplex with cellular antenna)
GNSS/GPS	
Acquisition:	30 seconds (cold start)
(Time to First Fix)	



Protocols:	— NMEA 0183
	- TAIP
Constellations:	— GPS
	— Galileo
	— GLONASS
	- BDS
Accuracy:	Autonomous @ open sky 2 meter (CEP-50)
Update Rate:	1 Hz (once per second)
Sensitivity:	<ul> <li>Acquisition: -147 dBm</li> </ul>
	— Tracking: -159 dBm
	<ul> <li>Reacquisition: -159 dBm</li> </ul>
Frequencies:	L1
Power:	Passive (no power provided)
ENVIRONMENTAL	
Temperature:	<ul> <li>Operating: -20 °C to 60 °C (-4 °F to 140 °F)</li> </ul>
	<ul> <li>Storage: -20 °C to 70 °C (-4 °F to 158 °F)</li> </ul>
Humidity:	<ul> <li>Operating: 5% to 95% non-condensing</li> </ul>
	<ul> <li>Storage: 5% to 95% non-condensing</li> </ul>
Ingress Protection:	IP30
POWER	
Required:	One of the following:
	— DC input range: 9–33 VDC
	<ul> <li>For 9–12 VDC installations, use a 3 A fuse</li> </ul>
	<ul> <li>For &gt; 12 VDC installations, use a 2 A fuse</li> </ul>
	- PoE Power
	— 802.3af PSE Type 1 (15 W)



Consumption:         5480 DC:           -         Sleep. Not supported           -         Idle 33 W           -         Typical 41 W           -         Heary: 58 W           5450 DC:         -           -         Sleep. Not supported           -         Idle 29 W           -         Typical 43 W           -         Heary: 46 W           5480/5450 PoE:         -           -         Be2 3d Class 3 (15 W)           PHYSICAL         221 (7.8 ac)           Construction:         Potto hausing           RELIABILITY         221 (7.8 ac)           Construction:         Potto hausing           RELIABILITY         -           Calculated MTBF:         -           -         S480/5450 Mub (20 Module: 1,343,279 hours (Telcordia SR332 at 25 °C)           -         S480/5450 with DP0 Module: 1,159,278 hours (Telcordia SR332 at 25 °C)           -         S480/5450 with DP0 Module: 1,212,886 hours (Telcordia SR332 at 25 °C)           -         S480/5450 with DP0 Module: 1,212,886 hours (Telcordia SR332 at 25 °C)           -         S480/5450 with DP0 Module: 1,212,886 hours (Telcordia SR332 at 25 °C)           -         S480/5450 with DP0 Module: 1,212,886 hours (Telcordia SR332 at 25 °C)		
<ul> <li>Idle: 33 W</li> <li>Typical: 41 W</li> <li>Heary, 58 W</li> <li>S480 DC:</li> <li>Steep: Not supported</li> <li>Idle: 2.9 W</li> <li>Typical: 33 W</li> <li>Heary, 46 W</li> <li>S400/S450 PGE:</li> <li>800/S450 PGE:&lt;</li></ul>	Consumption:	S400 DC:
<ul> <li>Typical: 4.1 W</li> <li>Heavy: 5.8 W</li> <li>S459 DC:</li> <li>Sleep: Not supported</li> <li>Idle: 2.9 W</li> <li>Typical: 3.1 W</li> <li>Heavy: 4.6 W</li> <li>S400/S459 PoE:</li> <li>a 802.3 of Closs 3 (L5 W)</li> <li>PHYSICAL</li> <li>Sleep: Not Supported</li> <li>100 × 105 × 31 mm (3.9 × 4.1 × 1.2 in)</li> <li>Weight:</li> <li>221 g (7.8 oz)</li> <li>Construction:</li> <li>Plosic housing</li> <li>RELIABILITY</li> <li>Sade0/S459 With GP10 Module: 1,345,279 hours (Telcordio SR332 at 25 °C)</li> <li>S400/S459 With GP10 Module: 1,245,279 hours (Telcordio SR332 at 25 °C)</li> <li>S400/S459 With DB9 Module: 1,712,806 hours (Telcordio SR332 at 25 °C)</li> <li>S400/S459 With DB9 Module: 1,712,806 hours (Telcordio SR332 at 25 °C)</li> <li>S400/S459 With DB9 Module: 1,712,806 hours (Telcordio SR332 at 25 °C)</li> <li>S400/S459 With DB9 Module: 1,712,806 hours (Telcordio SR332 at 25 °C)</li> <li>S400/S459 With DB9 Module: 1,712,806 hours (Telcordio SR332 at 25 °C)</li> <li>S400/S459 With DB9 Module: 1,712,806 hours (Telcordio SR332 at 25 °C)</li> <li>S400/S459 With DB9 Module: 1,712,806 hours (Telcordio SR332 at 25 °C)</li> <li>S400/S459 With DB9 Module: 1,712,806 hours (Telcordio SR332 at 25 °C)</li> <li>S400/S459 With DB9 Module: 1,712,806 hours (Telcordio SR332 at 25 °C)</li> <li>S400/S459 With DB9 Module: 1,712,806 hours (Telcordio SR332 at 25 °C)</li> <li>S400/S459 With DB9 Module: 1,712,806 hours (Telcordio SR332 at 25 °C)</li> <li>S400/S459 With DB9 Module: 1,712,806 hours (Telcordio SR332 at 25 °C)</li> <li>S400/S459 With DB9 Module: 1,712,806 hours (Telcordio SR332 at 25 °C)</li> <li>S400/S459 With DB9 Module: 1,712,806 hours (Telcordio SR332 at 25 °C)</li> <li>S400/S459 With DB9 Module: 1,712,806 hours (Telcordio SR332 at 25 °C)</li> <li>S400/S450 Hours (Telcordio SR32 at 25 °C)</li> <li>S400/S450 Hours (Telcordio SR32 at 25 °C)</li> <li>S400/S450 Hours</li></ul>		<ul> <li>Sleep: Not supported</li> </ul>
-         Heavy: 5.8 W           5450 DC:         -           -         Sleep: Not supported           -         Ide: 2.9 W           -         Typical: 3.3 W           -         Reavy: 4.6 W           S400/5450 PoE:         -           -         0802301 Closs 3 (15 W)           PHYSICAL         -           Size:         100 x 105 x 31 mm (39 x 4.1 x 1.2 in)           Weight:         221g (7.8 oz)           Construction:         Plustic housing           RELIABILITY         -           Sale/S450 with GPIO Module: 1,343.270 hours (Telcordia SR332 at 25 °C)           -         S400/5450 with GPIO Module: 1,459.720 hours (Telcordia SR332 at 25 °C)           -         S400/5450 with GPIO Module: 1,459.720 hours (Telcordia SR332 at 25 °C)           -         S400/5450 with GPIO Module: 1,459.720 hours (Telcordia SR332 at 25 °C)           -         S400/5450 with GPIO Module: 1,712.880 hours (Telcordia SR332 at 25 °C)           -         S400/5450 with GPIO Module: 1,712.880 hours (Telcordia SR332 at 25 °C)           -         S400/5450 with GPIO Module: 1,712.880 hours (Telcordia SR32 at 25 °C)           -         S400/5450 with GPIO Module: 1,712.880 hours (Telcordia SR32 at 25 °C)           -         S400/5450 with GPIO Module: 1,712.880 hours (Telcordia SR32 at 25 °C) </td <td></td> <td>— Idle: 3.3 W</td>		— Idle: 3.3 W
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<ul> <li>Skep: Not supported             <ul> <li>Idie: 29 W</li> <li>Typicol: 33 W</li> <li>Heory: 46 W</li> <li>Stable: 100 - 10</li></ul></li></ul>		— Heavy: 5.8 W
I Idle: 2.9 W       -         Typical: 3.3 W       -         Heavy: 4.6 W       5489/5459 PoE:         -       882.30 Class 3 (15 W)         PHYSICAL       -         Size:       109 x 105 x 31 mm (3.9 x 41 x 1.2 in)         Weight:       221 g (7.8 o.2)         Construction:       Plosit Abousing         RELIABILITY       -         Safe0/5459 with CPIO Module: 1,543,279 hours (Telcordia SR332 at 25 °C)         -       5489/5459 with CPIO Module: 1,543,279 hours (Telcordia SR332 at 25 °C)         -       5489/5459 with CPIO Module: 1,543,279 hours (Telcordia SR332 at 25 °C)         -       5489/5459 with CPIO Module: 1,712,886 hours (Telcordia SR332 at 25 °C)         -       S489/5459 with DB9 Module: 1,712,886 hours (Telcordia SR332 at 25 °C)         -       S489/5459 with DB9 Module: 1,712,886 hours (Telcordia SR332 at 25 °C)         -       S489/5459 with CB9 Module: 1,712,886 hours (Telcordia SR332 at 25 °C)         -       -         Safety:       -         Dil/CUL       -         -       CB Scheme         -       EN 62368-1         Materials:       -         WEEE       -         -       Colfornia Prop 65         Security:       -		S450 DC:
I Idle: 2.9 W       -         Typical: 3.3 W       -         Heavy: 4.6 W       5489/5459 PoE:         -       882.30 Class 3 (15 W)         PHYSICAL       -         Size:       109 x 105 x 31 mm (3.9 x 41 x 1.2 in)         Weight:       221 g (7.8 o.2)         Construction:       Plosit Abousing         RELIABILITY       -         Safe0/5459 with CPIO Module: 1,543,279 hours (Telcordia SR332 at 25 °C)         -       5489/5459 with CPIO Module: 1,543,279 hours (Telcordia SR332 at 25 °C)         -       5489/5459 with CPIO Module: 1,543,279 hours (Telcordia SR332 at 25 °C)         -       5489/5459 with CPIO Module: 1,712,886 hours (Telcordia SR332 at 25 °C)         -       S489/5459 with DB9 Module: 1,712,886 hours (Telcordia SR332 at 25 °C)         -       S489/5459 with DB9 Module: 1,712,886 hours (Telcordia SR332 at 25 °C)         -       S489/5459 with CB9 Module: 1,712,886 hours (Telcordia SR332 at 25 °C)         -       -         Safety:       -         Dil/CUL       -         -       CB Scheme         -       EN 62368-1         Materials:       -         WEEE       -         -       Colfornia Prop 65         Security:       -		<ul> <li>Sleep: Not supported</li> </ul>
- Heory: 4.6 W         S400/S450 PoE:         - 002.3 of Closs 3 (15 W)         PHYSICAL         Size:       100 × 105 × 31 mm (3.9 × 41 × 1.2 in)         Weight:       221 g (7.8 o.2)         Construction:       Phostic housing         RELIABILITY       Usits to housing         Calculated MTBF:       - S400/S450: 1,228,355 hours (Telcordia SR332 at 25 °C)         - S400/S450: with GPIO Module: 1,345,279 hours (Telcordia SR332 at 25 °C)         - S400/S450 with GPIO Module: 1,145,279 hours (Telcordia SR332 at 25 °C)         - S400/S450 with DB9 Module: 1,128,86 hours (Telcordia SR332 at 25 °C)         - S400/S450 with DB9 Module: 1,12,886 hours (Telcordia SR332 at 25 °C)         - S400/S450 with DB9 Module: 1,12,886 hours (Telcordia SR332 at 25 °C)         - S400/S450 with DB9 Module: 1,12,886 hours (Telcordia SR332 at 25 °C)         - S400/S450 with DB9 Module: 1,12,886 hours (Telcordia SR332 at 25 °C)         - S400/S450 with DB9 Module: 1,12,886 hours (Telcordia SR332 at 25 °C)         - S400/S450 with DB9 Module: 1,12,886 hours (Telcordia SR332 at 25 °C)         - S400/S450 with DB9 Module: 1,12,886 hours (Telcordia SR332 at 25 °C)         - S400/S450 with DB9 Module: 1,02         - Class Control         - VEEE         - REACH         - California Prop 65         Security:       N/A		
S400/S450 PoE: = 082.3df Class 3 (15 W)PHYSICALSize:100 x 105 x 31 mm (3.9 x 41 x 1.2 in)Weight:221 g (7.8 oz)Construction:Plastic housingRELIABILITYCalculated MTBF:5400/S450: 1,828,355 hours (Telcordia SR332 at 25 °C) = 5400/S450 with GPID Module: 1,343,279 hours (Telcordia SR332 at 25 °C) = 5400/S450 with GPID Module: 1,712,806 hours (Telcordia SR332 at 25 °C) = 5400/S450 with DB9 Module: 1,712,806 hours (Telcordia SR332 at 25 °C) = 5400/S450 with DB9 Module: 1,712,806 hours (Telcordia SR332 at 25 °C) = 5400/S450 with DB9 Module: 1,712,806 hours (Telcordia SR332 at 25 °C) = S400/S450 with DB9 Module: 1,712,806 hours (Telcordia SR332 at 25 °C) = S400/S450 with DB9 Module: 1,712,806 hours (Telcordia SR332 at 25 °C) = S400/S450 with DB9 Module: 1,712,806 hours (Telcordia SR332 at 25 °C) = S400/S450 with DB9 Module: 1,712,806 hours (Telcordia SR332 at 25 °C) = S400/S450 with DB9 Module: 1,712,806 hours (Telcordia SR332 at 25 °C) = S400/S450 with DB9 Module: 1,712,806 hours (Telcordia SR332 at 25 °C) = S400/S450 with DB9 Module: 1,712,806 hours (Telcordia SR332 at 25 °C) = S400/S450 with DB9 Module: 1,712,806 hours (Telcordia SR332 at 25 °C) = S400/S450 with DB9 Module: 1,712,806 hours (Telcordia SR332 at 25 °C) = S400/S450 with DB9 Module: 1,712,806 hours (Telcordia SR32 at 25 °C) = S400/S450 with DB9 Module: 1,712,806 hours (Telcordia SR32 at 25 °C) = S400/S450 with DB9 Module: 1,712,806 hours (Telcordia SR32 at 25 °C) = S400/S450 with DB9 Module: 1,712,806 hours (Telcordia SR32 at 25 °C) = S400/S450 with DB9 Module: 1,712,806 hours (Telcordia SR32 at 25 °C) = S400/S450 with DB9 Module: 1,712,806 hours (Telcordia SR32 at 25 °C) = Calcordia With DB9 Module: 1,712,806 hours (Telcordia SR32 at 25 °C) = Calcordia With DB9 Module: 1,712,806 hours (Telcordia SR32 at 25 °		— Typical: 3.3 W
PHYSICALSize:100 x 105 x 31 mm (39 x 41 x 1 2 in)Wight:221 g (7.8 oz)Construction:Plastic housingRELIABILITYCalculated MTBF:- S400/S450 x 1,828,355 hours (Telcordio SR332 at 25 °C) - S400/S450 with DEP Module: 1,459,729 hours (Telcordio SR332 at 25 °C) - S400/S450 with DEP Module: 1,72,886 hours (Telcordio SR332 at 25 °C) - S400/S450 with DEP Module: 1,72,886 hours (Telcordio SR332 at 25 °C) - S400/S450 with DEP Module: 1,72,886 hours (Telcordio SR332 at 25 °C) - S400/S450 with DEP Module: 1,72,886 hours (Telcordio SR322 at 25 °C) - S400/S450 with DEP Module: 1,72,886 hours (Telcordio SR322 at 25 °C) - S400/S450 with DEP Module: 1,72,886 hours (Telcordio SR322 at 25 °C) - S400/S450 with DEP Module: 1,72,886 hours (Telcordio SR322 at 25 °C) - S400/S450 with DEP Module: 1,72,886 hours (Telcordio SR322 at 25 °C) - S400/S450 with DEP Module: 1,72,886 hours (Telcordio SR322 at 25 °C) - S400/S450 with DEP Module: 1,72,886 hours (Telcordio SR322 at 25 °C) - S400/S450 with DEP Module: 1,72,886 hours (Telcordio SR322 at 25 °C) - S400/S450 with DEP Module: 1,72,886 hours (Telcordio SR322 at 25 °C) - S400/S450 with DEP Module: 1,72,886 hours (Telcordio SR322 at 25 °C) - S400/S450 with DEP Module: 1,72,886 hours (Telcordio SR322 at 25 °C) - S400/S450 with DEP Module: 1,72,886 hours (Telcordio SR322 at 25 °C) - S400/S450 with DEP Module: 1,72,886 hours (Telcordio SR322 at 25 °C) - S400/S450 with DEP Module: 1,659,720 hours (Telcordio SR322 at 25 °C) - S400/S450 with DEP Module: 1,659,720 hours (Telcordio SR322 at 25 °C) - S400/S450 hours (Telcordio SR32 hours (Telcordio SR32 hours (Telcordio SR32 hours (Telco		— Heavy: 4.6 W
PHYSICAL           Size:         100 x 105 x 31 mm (3.9 x 4.1 x 1.2 in)           Weight:         221 g (7.8 oz)           Construction:         Plastic housing           RELIABILITY            Calculated MTBF:         - S400/S450: 1.828,355 hours (Telcordia SR332 at 25 °C) - S400/S450: with GPIO Module: 1,343,279 hours (Telcordia SR332 at 25 °C) - S400/S450: with GPIO Module: 1,712,886 hours (Telcordia SR332 at 25 °C) - S400/S450: with DB9 Module: 1,712,886 hours (Telcordia SR332 at 25 °C)           CERTIFICATIONS         - UL/CUL - C B Scheme - E N 62360-1           Materials:         - WEEE - RoHS - REACH - California Prop 65           Security:         N/A           Shock/Vibration/Humidity:         - MIL STD 810H Method 516.8, Procedure I - MIL STD 810H Method 516.8, Procedure V           Hazardous Locations:         - Class I Div 2 (North Americo)		S400/S450 PoE:
Size:100 x 105 x 31 mm (3.9 x 4.1 x 1.2 in)Weight:221 g (7.8 oz)Construction:Plostic housingRELIABILITY-Calculated MTBF:-S400/S450 with GP10 Module: 1,343,279 hours (Telcordia SR332 at 25 °C) -S400/S450 with Ethernet Module: 1,659,720 hours (Telcordia SR332 at 25 °C) -S400/S450 with DB9 Module: 1,712,886 hours (Telcordia SR332 at 25 °C) -Sadority:-UL/CUL -CB Scheme -En 62368-1-Materials:-WEEE -RoHS -REACH -California Prop 65Security:N/AShock/Vibration/Humidity:-Hizordous Locations:-Class 1 Div 2 (North Americo)		— 802.3af Class 3 (15 W)
Weight:221 g (7.8 oz)Construction:Plastic housingRELIABILITYCalculated MTBF:- S400/S450: 1,828,355 hours (Telcordia SR332 at 25 °C) - S400/S450 with GPIO Module: 1,343,279 hours (Telcordia SR332 at 25 °C) - S400/S450 with DB9 Module: 1,742,886 hours (Telcordia SR332 at 25 °C) - S400/S450 with DB9 Module: 1,712,886 hours (Telcordia SR332 at 25 °C) 	PHYSICAL	
Construction:       Plastic housing         RELIABILITY         Calculated MTBF:       S400/S450: 1,828,355 hours (Telcordia SR332 at 25 °C)         S 5400/S450 with GPIO Module: 1,343,279 hours (Telcordia SR332 at 25 °C)       S400/S450 with GPIO Module: 1,659,720 hours (Telcordia SR332 at 25 °C)         CERTIFICATIONS       UL/CUL       CB Scheme       EN 62368-1         Materials:       WEEE       RAGHS       REACH       California Prop 65         Security:       N/A       MIL STD 810H Method 514.8, Annex C-1, Category 4       MIL STD 810H Method 516.8, Procedure V         Hazardous Locations:       — Class I Div 2 (North America)       — Class I Div 2 (North America)	Size:	100 x 105 x 31 mm (3.9 x 4.1 x 1.2 in)
Construction:       Plastic housing         RELIABILITY         Calculated MTBF:       S400/S450: 1,828,355 hours (Telcordia SR332 at 25 °C)         S400/S450 with GPIO Module: 1,343,279 hours (Telcordia SR332 at 25 °C)       S400/S450 with GPIO Module: 1,659,720 hours (Telcordia SR332 at 25 °C)         CERTIFICATIONS       UL/CUL       CB Scheme       EN 62368-1         Materials:       UL/CUL       CB Scheme       EN 62368-1         Security:       N/A       N/A         Shock/Vibration/Humidity:       MIL STD 810H Method 514.8, Annex C-1, Category 4       MIL STD 810H Method 516.8, Procedure I         Hozordous Locations:       Class I Div 2 (North America)       Class I Div 2 (North America)	Weight:	221 g (7.8 oz)
RELIABILITY         Calculated MTBF:       = \$4400/\$450: 1,828,355 hours (Telcordia SR332 at 25 °C) = \$400/\$450 with GPIO Module: 1,343,279 hours (Telcordia SR332 at 25 °C) = \$400/\$450 with Ethernet Module: 1,659,720 hours (Telcordia SR332 at 25 °C) = \$400/\$450 with DB9 Module: 1,712,886 hours (Telcordia SR332 at 25 °C)         CERTIFICATIONS         Safety:       = UL/CUL = CB Scheme = EN 62368-1         Materials:       = WEEE = RoHS = REACH = California Prop 65         Security:       N/A         Shock/Vibration/Humidity:       = MIL STD 810H Method 514.8, Annex C-1, Category 4 = MIL STD 810H Method 516.8, Procedure I = MIL STD 810H Method 516.8, Procedure V         Hozardous Locations:       = Class 1 Div 2 (North Americo)	Construction:	
Calculated MTBF:       - S400/S450: 1,828,355 hours (Telcordia SR332 at 25 °C)         - S400/S450 with GPIO Module: 1,343,279 hours (Telcordia SR332 at 25 °C)         - S400/S450 with Ethernet Module: 1,659,720 hours (Telcordia SR332 at 25 °C)         - S400/S450 with DB9 Module: 1,712,886 hours (Telcordia SR332 at 25 °C)         - S400/S450 with DB9 Module: 1,712,886 hours (Telcordia SR332 at 25 °C)         - S400/S450 with DB9 Module: 1,712,886 hours (Telcordia SR332 at 25 °C)         - Security:       - UL/CUL         - CB Scheme         - EN 62368-1         Materials:       - WEEE         - RoHS         - REACH         - California Prop 65         Security:       N/A         Shock/Vibration/Humidity:       - MIL STD 810H Method 514.8, Annex C-1, Category 4         - MIL STD 810H Method 516.8, Procedure I       - MIL STD 810H Method 516.8, Procedure V	RELIABILITY	
-       S400/S450 with GPIO Module: 1,343,279 hours (Telcordia SR332 at 25 °C)       -         -       S400/S450 with Ethernet Module: 1,659,720 hours (Telcordia SR332 at 25 °C)       -         -       S400/S450 with DB9 Module: 1,712,886 hours (Telcordia SR332 at 25 °C)         CERTIFICATIONS       -       UL/CUL         Sofety:       -       UL/CUL         -       CB Scheme       -         -       EN 62368-1       -         Materials:       -       WEEE         -       RoHS       -         -       California Prop 65         Security:       N/A         Shock/Vibration/Humidity:       -       MIL STD 810H Method 514.8, Annex C-1, Category 4         -       MIL STD 810H Method 516.8, Procedure I       -         -       MIL STD 810H Method 516.8, Procedure V       -         Hazardous Locations:       -       Closs 1 Div 2 (North Americo)		
- S400/S450 with Ethernet Module: 1,659,720 hours (Telcordia SR332 at 25 °C)         - S400/S450 with DB9 Module: 1,712,886 hours (Telcordia SR332 at 25 °C)         CERTIFICATIONS         Sofety:       - UL/CUL         - CB Scheme         - EN 62368-1         Materials:       - WEEE         - RoHS         - RACH         - California Prop 65         Security:       N/A         Mult_STD 810H Method 514.8, Annex C-1, Category 4         - MIL_STD 810H Method 516.8, Procedure I         - MIL_STD 810H Method 516.8, Procedure I         - MIL_STD 810H Method 516.8, Procedure V	Calculated MTBF:	<ul> <li>S400/S450: 1,828,355 hours (Telcordia SR332 at 25 °C)</li> </ul>
-       S400/S450 with DB9 Module: 1,712,886 hours (Telcordia SR332 at 25 °C)         CERTIFICATIONS         Safety:       -         -       UL/CUL         -       CB Scheme         -       EN 62368-1         Materials:       -         -       REACH         -       California Prop 65         Security:       N/A         Shock/Vibration/Humidity:       -         -       MIL STD 810H Method 514.8, Annex C-1, Category 4         -       MIL STD 810H Method 516.8, Procedure I         -       MIL STD 810H Method 516.8, Procedure V		<ul> <li>S400/S450 with GPIO Module: 1,343,279 hours (Telcordia SR332 at 25 °C)</li> </ul>
CERTIFICATIONS         Safety:       – UL/cUL         C CB Scheme         E N 62368-1         Materials:       – WEEE         R RHS         R REACH         C California Prop 65         Security:       N/A         Shock/Vibration/Humidity:       – MIL STD 810H Method 514.8, Annex C-1, Category 4         MIL STD 810H Method 516.8, Procedure I       – MIL STD 810H Method 516.8, Procedure V         Hazardous Locations:       – Class I Div 2 (North Americo)		<ul> <li>S400/S450 with Ethernet Module: 1,659,720 hours (Telcordia SR332 at 25 °C)</li> </ul>
Safety:       -       UL/cUL         -       CB Scheme         -       EN 62368-1         Materials:       -       WEEE         -       RoHS         -       REACH         -       California Prop 65         Security:       N/A         Shock/Vibration/Humidity:       -         -       MIL STD 810H Method 514.8, Annex C-1, Category 4         -       MIL STD 810H Method 516.8, Procedure I         -       MIL STD 810H Method 516.8, Procedure V		<ul> <li>S400/S450 with DB9 Module: 1,712,886 hours (Telcordia SR332 at 25 °C)</li> </ul>
<ul> <li>CB Scheme</li> <li>EN 62368-1</li> <li>Materials:</li> <li>WEEE</li> <li>RoHS</li> <li>REACH</li> <li>California Prop 65</li> <li>Security:</li> <li>N/A</li> <li>Shock/Vibration/Humidity:</li> <li>MIL STD 810H Method 514.8, Annex C-1, Category 4</li> <li>MIL STD 810H Method 516.8, Procedure I</li> <li>MIL STD 810H Method 516.8, Procedure V</li> <li>Hazardous Locations:</li> <li>Class I Div 2 (North America)</li> </ul>	CERTIFICATIONS	
<ul> <li>CB Scheme</li> <li>EN 62368-1</li> <li>Materials:</li> <li>WEEE</li> <li>RoHS</li> <li>REACH</li> <li>California Prop 65</li> <li>Security:</li> <li>N/A</li> <li>Shock/Vibration/Humidity:</li> <li>MIL STD 810H Method 514.8, Annex C-1, Category 4</li> <li>MIL STD 810H Method 516.8, Procedure I</li> <li>MIL STD 810H Method 516.8, Procedure V</li> <li>Hazardous Locations:</li> <li>Class I Div 2 (North America)</li> </ul>	Catholic	
<ul> <li>EN 62368-1</li> <li>Materials:</li> <li>WEEE</li> <li>ROHS</li> <li>REACH</li> <li>California Prop 65</li> <li>Security:</li> <li>N/A</li> <li>Shock/Vibration/Humidity:</li> <li>MIL STD 810H Method 514.8, Annex C-1, Category 4</li> <li>MIL STD 810H Method 516.8, Procedure I</li> <li>MIL STD 810H Method 516.8, Procedure V</li> <li>Hazardous Locations:</li> <li>Class I Div 2 (North America)</li> </ul>	Safety:	
Materials:       – WEEE       – RoHS         – REACH       – California Prop 65         Security:       N/A         Shock/Vibration/Humidity:       – MIL STD 810H Method 514.8, Annex C-1, Category 4         – MIL STD 810H Method 516.8, Procedure I       – MIL STD 810H Method 516.8, Procedure V         Hazardous Locations:       – Class I Div 2 (North Americo)		
<ul> <li>RoHS</li> <li>REACH</li> <li>California Prop 65</li> <li>Security: N/A</li> <li>Shock/Vibration/Humidity: MIL STD 810H Method 514.8, Annex C-1, Category 4</li> <li>MIL STD 810H Method 516.8, Procedure I</li> <li>MIL STD 810H Method 516.8, Procedure V</li> </ul>		— EN 02308-1
REACH - California Prop 65Security:N/AShock/Vibration/Humidity:MIL STD 810H Method 514.8, Annex C-1, Category 4 - MIL STD 810H Method 516.8, Procedure I - MIL STD 810H Method 516.8, Procedure VHazardous Locations:- Class 1 Div 2 (North America)	Materials:	- WEEE
<ul> <li>California Prop 65</li> <li>Security: N/A</li> <li>Shock/Vibration/Humidity: - MIL STD 810H Method 514.8, Annex C-1, Category 4</li> <li>MIL STD 810H Method 516.8, Procedure I</li> <li>MIL STD 810H Method 516.8, Procedure V</li> </ul>		- RoHS
Security:       N/A         Shock/Vibration/Humidity:       - MIL STD 810H Method 514.8, Annex C-1, Category 4         MIL STD 810H Method 516.8, Procedure I       - MIL STD 810H Method 516.8, Procedure V         Hazardous Locations:       - Closs I Div 2 (North America)		- REACH
Shock/Vibration/Humidity:       — MIL STD 810H Method 514.8, Annex C-1, Category 4         — MIL STD 810H Method 516.8, Procedure I         — MIL STD 810H Method 516.8, Procedure V         Hazardous Locations:       — Class I Div 2 (North America)		— California Prop 65
<ul> <li>MIL STD 810H Method 516.8, Procedure I</li> <li>MIL STD 810H Method 516.8, Procedure V</li> </ul>	Security:	N/A
<ul> <li>MIL STD 810H Method 516.8, Procedure I</li> <li>MIL STD 810H Method 516.8, Procedure V</li> </ul>	Shock/Vibration/Humidity	— MIL STD 810H Method 514.8 Appex C-1 Category 4
<ul> <li>MIL STD 810H Method 516.8, Procedure V</li> <li>Hazardous Locations: – Class I Div 2 (North America)</li> </ul>	Shocky vibration/ numulty:	
Hazardous Locations: — Class I Div 2 (North America)		
- ATEX 2 (Europe)	Hazardous Locations:	<ul> <li>Class I Div 2 (North America)</li> </ul>
		- ATEX 2 (Europe)



Regulatory:	— FCC (U.S.)
	— IC (Canada)
	— CE (European Union)
	— RCM (AU/NZ)
	— UKCA (UK)
	— ANATEL (Brazil)
	— IFT (Mexico)
	- SUBTEL (Chile)
	- MCMC (Malaysia)
	- IMDA (Singapore)
CLOUD SERVICES	
Service Plans:	NetCloud Service for IoT
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> <li>— 2400-2484.2 MHz (2.4 GHz): 19.60 dBm Conducted</li> </ul>
	<ul> <li>— 5150–5250 MHz: 16.25 dBm Conducted</li> </ul>
	<ul> <li>— 5250–5350 MHz: 15.89 dBm Conducted</li> </ul>
	<ul> <li>— 5470–5725 MHz: 15.93 dBm Conducted</li> </ul>
	<ul> <li>— 5725–5850 MHz: 14.38 dBm Conducted</li> </ul>
IC:	<ul> <li>2400-2484.2 MHz (2.4 GHz): 19.60 dBm Conducted</li> </ul>
	<ul> <li>— 5150–5250 MHz: 16.25 dBm Conducted</li> </ul>
	<ul> <li>5250–5350 MHz: 15.89 dBm Conducted</li> </ul>
	<ul> <li>5470–5725 MHz: 15.93 dBm Conducted</li> </ul>
	<ul> <li>5725–5850 MHz: 14.38 dBm Conducted</li> </ul>
CE.	2400-2404 2 MHz (2.4 GHz), 17 50 dPm Conducted
CE:	<ul> <li>2400-2484.2 MHz (2.4 GHz): 17.50 dBm Conducted</li> <li>5150, 5250 MHz, 16.64 dBm Conducted</li> </ul>
CE:	- 5150-5250 MHz: 16.64 dBm Conducted
CE:	<ul> <li>5150–5250 MHz: 16.64 dBm Conducted</li> <li>5250–5350 MHz: 16.64 dBm Conducted</li> </ul>
CE:	<ul> <li>5150-5250 MHz: 16.64 dBm Conducted</li> <li>5250-5350 MHz: 16.64 dBm Conducted</li> <li>5470-5725 MHz: 17.01 dBm Conducted</li> </ul>
CE:	<ul> <li>5150–5250 MHz: 16.64 dBm Conducted</li> <li>5250–5350 MHz: 16.64 dBm Conducted</li> </ul>
CE: UKCA:	<ul> <li>5150-5250 MHz: 16.64 dBm Conducted</li> <li>5250-5350 MHz: 16.64 dBm Conducted</li> <li>5470-5725 MHz: 17.01 dBm Conducted</li> </ul>
	<ul> <li>5150-5250 MHz: 16.64 dBm Conducted</li> <li>5250-5350 MHz: 16.64 dBm Conducted</li> <li>5470-5725 MHz: 17.01 dBm Conducted</li> <li>5725-5875 MHz: 11.50 dBm Conducted</li> </ul>
	<ul> <li>5150-5250 MHz: 16.64 dBm Conducted</li> <li>5250-5350 MHz: 16.64 dBm Conducted</li> <li>5470-5725 MHz: 17.01 dBm Conducted</li> <li>5725-5875 MHz: 11.50 dBm Conducted</li> <li>2400-2484.2 MHz (2.4 GHz): 17.50 dBm Conducted</li> <li>5150-5250 MHz: 16.64 dBm Conducted</li> </ul>
	<ul> <li>5150-5250 MHz: 16.64 dBm Conducted</li> <li>5250-5350 MHz: 16.64 dBm Conducted</li> <li>5470-5725 MHz: 17.01 dBm Conducted</li> <li>5725-5875 MHz: 11.50 dBm Conducted</li> <li>2400-2484.2 MHz (2.4 GHz): 17.50 dBm Conducted</li> </ul>



RCM:	<ul> <li>2400-2484.2 MHz (2.4 GHz): 17.50 dBm Conducted</li> </ul>
	<ul> <li>5150–5250 MHz: 16.64 dBm Conducted</li> </ul>
	<ul> <li>5250–5350 MHz: 16.64 dBm Conducted</li> </ul>
	<ul> <li>5470–5725 MHz: 17.01 dBm Conducted</li> </ul>
	- 5725-5850 MHz: 14.38 dBm Conducted
Global Safe Mode:	2.4 GHz: 14 dBm Conducted
PERFORMANCE <sup>†</sup>	
Stateful Firewall	95 Mbps
Throughput:	
IPsec VPN Throughput:	20 Mbps
Concurrent VPN Tunnels:	5
Concurrent Sessions (TPC):	32,000
Typical IoT Client Count <sup>++</sup> :	25
Layer 2 / Layer 3 VLANs:	Up to 64
LEDs	
	See the Ericsson Cradlepoint S400 and S450 Quick Start Guide.

+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.

++Typical IoT Client represents a single connected client device to the Ericsson Cradlepoint and typically passing 1Mbps or less data per client.

#### **Enterprise-Class Modem Specifications**

SPECIFICATION	S400-C6-NA
Technology:	Cat 6 LTE (3GPP Rel. 11)
	<ul> <li>Dual SIM slots, 4FF form factor</li> <li>SIM-based auto-carrier selection</li> </ul>
3G:	N/A
Carrier Aggregation:	<ul> <li>Downlink: Up to 2CA</li> <li>Uplink: Up to 1 CA</li> </ul>
	See Understanding Carrier Aggregation.
Peak Rates:	LTE
	<ul> <li>Download: 300 Mbps</li> <li>Upload: 50 Mbps</li> </ul>
MIMO:	2x2 MIMO
Modulation:	Up to 16 QAM

4G/LTE Bands:	FDD
	<ul> <li>B2 (1900), B4 (1700), B5 (850), B7 (2600), B12 (700), B13 (700), B14 (700), B25 (1900), B26 (850), B29 (700), B30 (2300), B66 (1700), B71 (600)</li> </ul>
	TDD
	— B41 (2500), B48 (3500)
3G Bands:	N/A
Power:	LTE 23 dBm ± 2 (typical conducted)
Antennas:	SMA female connectors, external 600 MHz - 6 GHz cellular paddle antennas (Qty 2, included only with certain
	packages)
GNSS/GPS:	Active GNSS
	— GPS
	- GLONASS
	- BeiDou
	— Galileo
SMS:	Yes
Regulatory:	— FCC (U.S.)
	— IC (Canada)
Network Operator Standards:	PTCRB (U.S., Canada)
GCF Global Operators:	N/A
PTCRB North America	https://www.ptcrb.com/about/
Operators:	
Network Operator	AT&T, T-Mobile, Verizon <sup>+</sup>
Certifications:	
Public Safety Network	T-Mobile Connecting Heroes, Verizon Frontline
Certifications:	
Private Cellular Network:	Yes, includes FCC Part 96 (CBRS Band 48)

SPECIFICATION	S400-C6-EA
Technology:	Cat 6 LTE (3GPP Rel. 11), DC-HSPA+
	<ul> <li>Dual SIM slots, 4FF form factor</li> <li>SIM-based auto-carrier selection</li> </ul>
3G:	UMTS/HSPA+/DC-HSDPA



Carrier Aggregation:	<ul> <li>Downlink: Up to 2 CA</li> </ul>
	- Uplink: Up to 1 CA
	Care the device of the Care in America time
	See Understanding Carrier Aggregation.
Peak Rates:	LTE
	— Download: 300 Mbps
	— Upload: 50 Mbps
	HSPA+
	- Download: 42 Mbps
	- Upload: 5.76 Mbps
	WCDMA
	<ul> <li>Download: 384 kbps</li> </ul>
	- Upload: 384 kbps
MIMO:	2x2 MIMO
Modulation:	Downlink: Up to 64 QAM
	- Uplink: Up to 16 QAM
4G/LTE Bands:	FDD
	B1 (2100), B3 (1800), B5 (850), B7 (2600), B8 (900), B20 (800), B28 (700), B32 (1500)
	TDD
	— B38 (2600), B40 (2300), B41 (2500), B42 (3500), B43 (3700)
3G Bands:	B1, B3, B5, B8
Power:	LTE 23 dBm ± 2, DC-HSPA+ 23 dBm ± 1 (typical conducted)
Antennas:	SMA female connectors, external 600 MHz - 6 GHz cellular paddle antennas (Qty 2, included only with certain
	packages)
GNSS/GPS:	Active GNSS
	— GPS
	- GLONASS
	- BeiDou
	— Galileo
SMS:	Yes
Regulatory:	— CE (European Union)
Regulatory.	<ul> <li>RCM (AU/NZ)</li> </ul>
	— UKCA (UK)
Network Operator Standards:	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:	See note <sup>+</sup>
Public Safety Network	N/A
Certifications:	
Private Cellular Network:	N/A

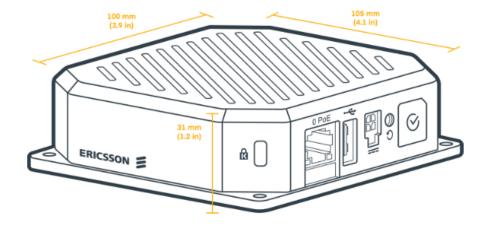
SPECIFICATION	S400-C6-LA	
Technology:	Cat 6 LTE (3GPP release 11), DC-HSPA+	
	<ul> <li>Dual SIM slots, 4FF form factor</li> </ul>	
	<ul> <li>SIM-based auto-carrier selection</li> </ul>	
3G:	UMTS/HSPA+/DC-HSDPA	
Carrier Aggregation:	N/A	
Peak Rates:	LTE	
	— Download: 300 Mbps	
	— Upload: 50 Mbps	
	HSPA+	
	— Download: 42 Mbps	
	— Upload: 5.76 Mbps	
	WCDMA	
	— Download: 384 kbps	
	— Upload: 384 kbps	
MIMO:	2x2 MIMO	
Modulation:	- Downlink: Up to 64 QAM	
	- Uplink: Up to 16 QAM	
4G/LTE Bands:	FDD	
	— B2 (1900), B4 (1700), B5 (850), B7 (2600), B8 (900), B25 (1900), B28 (700), B66 (1700)	
	TDD	
	— B42 (3500), B43 (3700)	
3G Bands:	B2, B4, B5, B8	
Power:	LTE 23 dBm ± 2; HSPA+ 23 dBm ± 1 (typical conducted)	
Antennas:	SMA female connectors, external 600 MHz - 6 GHz cellular paddle antennas (Qty 2, included only with certain	
	packages)	

GNSS/GPS:	Active GNSS
	- GPS
	- GLONASS
	- BeiDou
	— Galileo
SMS:	Yes
Regulatory:	— FCC (U.S.)
	— IC (Canada)
	— CE (European Union)
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 <sup>†</sup>
Public Safety Network	FirstNet Trusted <sup>TM</sup> , T-Mobile Connecting Heroes, Verizon Frontline
Certifications:	
Private Cellular Network:	N/A

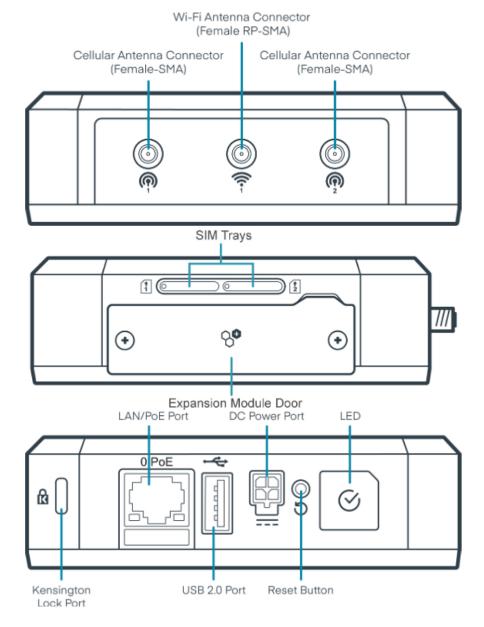
SPECIFICATION	S450-C6-NA
Technology:	Cat 6 LTE (3GPP release 11)
	<ul> <li>Dual SIM slots, 4FF form factor</li> </ul>
	<ul> <li>SIM-based auto-carrier selection</li> </ul>
3G:	N/A
Carrier Aggregation:	<ul> <li>Downlink: Up to 2 CA</li> <li>Uplink: Up to 1 CA</li> </ul>
	See Understanding Carrier Aggregation.
Peak Rates:	LTE
	<ul> <li>Download: 300 Mbps</li> <li>Upload: 50 Mbps</li> </ul>
MIMO:	2x2 MIMO
Modulation:	Up to 16 QAM

4G/LTE Bands:	FDD
	B2 (1900), B4 (1700), B5 (850), B7 (2600), B12 (700), B13 (700), B14 (700), B25 (1900), B26 (850), B29 (700), B30 (2300), B66 (1700), B71 (600)
	TDD
	— B41 (2500), B48 (3500)
3G Bands:	N/A
Power:	LTE 23 dBm ± 2 (typical conducted)
Antennas:	SMA female connectors, external 600 MHz - 6 GHz cellular paddle antennas (Qty 2, included only with certain
	packages)
GNSS/GPS:	Active GNSS
	— GPS
	- GLONASS
	— BeiDou
	— Galileo
SMS:	Yes
Regulatory:	— FCC (U.S.)
	— IC (Canada)
Network Operator Standards:	— PTCRB (U.S., Canada)
·	— GCF (Worldwide)
GCF Global Operators:	N/A
PTCRB North America	https://www.ptcrb.com/about/
Operators:	
Network Operator	AT&T, T-Mobile, Verizon <sup>+</sup>
Certifications:	
Public Safety Network	FirstNet Trusted <sup>TM</sup> , T-Mobile Connecting Heroes, Verizon Frontline
Certifications:	
Private Cellular Network:	Yes, includes FCC Part 96 (CBRS Band 48)

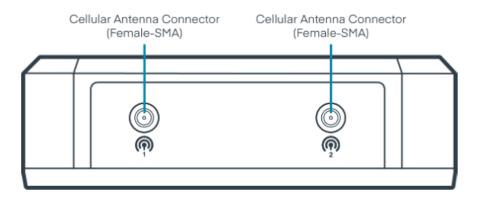
### **Physical Measurements & Features**



#### Features — S400 Series



#### Features — S450 Series



## SIM Card Info



### Ordering Guide

**NetCloud IoT Essentials** packages and plans contain all the features and capabilities required for a broad range of IoT 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 IoT Advanced Plan** can be added to the NetCloud Essentials package at any time. See additional details of what is included in the Essential and Advanced NetCloud software: cradlepoint.com/netcloud-service

#### NetCloud IoT Packages for the S400 Series Router

REGION	MODEM	IOT PACKAGE PLAN	PART NUMBER
North America:	Cat 6 (150 Mbps) with Wi-Fi, with AC power supply	Essentials	TBTy-0400-C6-NA-
U.S. & Canada	and antennas		Ν
		Essentials + Advanced	
			TBVy-0400-C6-NA
			Ν
	Cat 6 (150 Mbps) without Wi-Fi, with AC power	Essentials	TBTy-0450-C6-NA
	supply and antennas		Ν
		Essentials + Advanced	
			TBVy-0450-C6-N

North America:	Cat 6 (150 Mbps) with Wi-Fi, AC power supply, and	Essentials	TBTy-0400-C6-LA-
Mexico	antennas		М
		Essentials + Advanced	
			TBVy-0400-C6-LA-
			М
Europe: European Union and United	Cat 6 (150 Mbps) with Wi-Fi, AC power supply, and	Essentials	TBTy-0400-C6-EA-
Kingdom	antennas		М
		Essentials + Advanced	
			TBVy-0400-C6-EA-
			М
All Regions:		Advanced	TBx-NCADV
		Renewal Essentials	TBTx-NCESSC-R
		Renewal Essentials + Advanced	TBVx-NCEASC-R

x = 1, 3, or 5 years y = 3 or 5 years

#### Accessories

INCLUDED WITH DESIGNATED SKUS	PART NUMBER
One of the following:	
<ul> <li>Power Supply, 12 VDC, 2x2, 1.5 meters (North America Type A)</li> </ul>	170716-001
<ul> <li>Power Supply, 12 VDC, 2x2, 1.5 meters (North America-United Kingdom-Europe-Australia Types A-G-C-I)</li> </ul>	170717-000
Cellular Antenna, Black, 600 MHz - 6 GHz, SMA, 180 mm (Qty 2)	170704-002
Wi-Fi Antenna, 2.4/5 GHz RPSMA GRA 184 mm (Qty 1)	170836-000
OPTIONAL	PART NUMBER
GPIO Cable, Small 2x10 MPP Black, 1 meter, 20 AWG	170919-000
DIN Rail Mounting Bracket	170904-000
Drop Ceiling Mounting Bracket	170920-000
Expansion Module - Dual Ethernet	MC20-ETH
Expansion Module - Serial (DB9)	MC20-SRL
Expansion Module - GPIO	MC20-GPO

### Support & Warranty

The S400 Series Router is only sold as a component of NetCloud IoT Connectivity, IoT Essentials or Essentials + Advanced packages.

- Only IoT Essentials or Essentials + Advanced 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 IoT Essentials or Essentials + Advanced Service Plan.

## **More Information**

Find the most up-to-date information at cradlepoint.com/s400