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Data Sheet
Ericsson Cradlepoint MC400

2025-01-09

Ericsson Cradlepoint MC400 modular modems allow Ericsson Cradlepoint MC400-capable branch, mobile, and IoT routers to be easily field upgraded with the most recent industry-leading cellular capabilities. The Ericsson Cradlepoint MC400 modular modems combine enterprise reliability with industry leading performance. Available modems include both LTE Advanced and 5G for fast robust connections.

Product Page

NetCloud Service

Quick Start Guide

Notable Features

— Better return on investment with the capability to upgrade to the latest modems without replacing the original hardware.

— Higher availability by installing a second modem for failover connectivity.

— Lower data plan costs by automatically switching to the second modem/SIM when the data plan cap on the primary modem/SIM has been reached.

— Certified versions are available for public safety networks worldwide.

Hardware Specifications

The following features are delivered through the hardware.

ENVIRONMENTAL	MC400-1200M-B	MC400-5GB
Temperature:	— Operating: -30 °C to 70 °C (-22 °F to 158 °F) — Storage: -40 °C to 85 °C (-40 °F to 185 °F)	— Operating: -30 °C to 70 °C (-22 °F to 158 °F) — Storage: -40 °C to 85 °C (-40 °F to 185 °F)
Humidity:	— Operating: 5% to 95% — Storage: 5% to 95%	— Operating: 5% to 95% — Storage: 5% to 95%

POWER		
Required:	Provided through USB by the host	Provided through USB by the host
PHYSICAL		
Size:	93 x 74 x 13 mm (3.7 x 2.9 x 0.5 in)	93 x 74 x 13 mm (3.7 x 2.9 x 0.5 in)
Weight:	.104 kg (3.7 oz)	.104 kg (3.7 oz)
CERTIFICATIONS		
Safety:	— UL/cUL — CB Scheme — EN 60950-1 — EN 62368-1	— UL/cUL — CB Scheme — EN 62368-1
Shock/Vibration/Humidity:	Compliant with MIL STD 810G and SAEJ1455 when inserted in an Ericsson Cradlepoint IBR1700 router, an Ericsson Cradlepoint COR Extensibility Dock attached to an Ericsson Cradlepoint IBR900 router, or an Ericsson Cradlepoint R1900 router with an Ericsson Cradelpoint RX30-MC managed accessory.	Compliant with MIL STD 810G and SAEJ1455 when inserted in an Ericsson Cradlepoint IBR1700 router or an Ericsson Cradlepoint R1900 router with an Ericsson Cradlepoint RX30-MC managed accessory.
Materials:	— WEEE — RoHS — REACH — California Prop 65	— WEEE — RoHS — REACH — California Prop 65
COMPATIBILITY		
Supported Endpoints:	— AER1600 — AER2200 — CBA850 — IBR1700 — IBR900[†] — IBR600C[†] — E300 — E3000 — R1900[††] — R500[†] — R920[†††]	— AER2200 — IBR1700 — E300 — E3000 — R1900[††] — R920[†††]

[†]Requires an Ericsson Cradlepoint COR Extensibility Dock.[††]Requires an Ericsson Cradlepoint RX30-MC managed accessory.[†††]Requires an Ericsson Cradlepoint RX20-MC managed accessory.

Enterprise-Class Modem Specifications

SPECIFICATION	MC400-1200M-B	MC400-5GB

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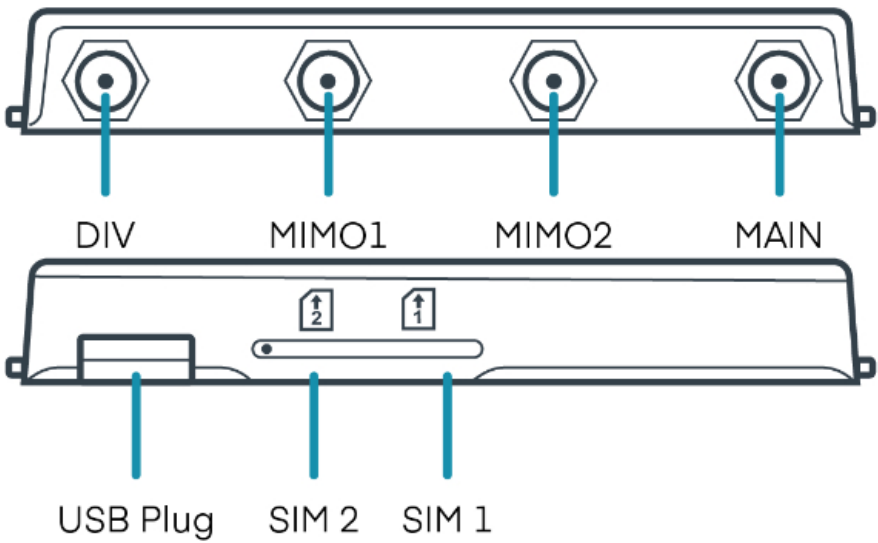| Technology:	Cat 18 LTE Advanced Pro	5G FR1 NSA/SA and 4G LTE
	— Dual SIM slots, 2FF form factor — SIM-based auto-carrier selection — 3GPP Release 12	— LTE Advanced Pro Category 20 — Dual SIM slots, 4FF form factor — SIM-based auto-carrier selection — 3GPP Release 15
3G:	WCDMA/DC-HSPA+	WCDMA/DC-HSPA+
Carrier Aggregation:	Up to 5CA downlink, 2CA uplink See Understanding Carrier Aggregation.	LTE Only — Downlink: Up to 7CA — Uplink: Up to 2CA LTE + 5G NR ENDC — Downlink: 1CA — Uplink: 1CA See Understanding Carrier Aggregation.
Peak Downlink Rates:	— LTE: 1.2 Gbps — DC-HPSA+: 42.2 Mbps	Up to 4.14 Gbps — based on 20 Layers LTE + TDD (100 MHz BW, 256 QAM, 4X4)
Peak Uplink Rates:	— LTE: 150 Mbps — DC-HPSA+: 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:	Up to 256 QAM	5GB FR1 — Downlink: Up to 256 QAM — Uplink: Up to 256 QAM. (Only enabled on particular carrier equipment from 9190 data sheet.)
4G/LTE Bands:	FDD — 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) TDD — B38 (2600), B39 (1900), B40 (2300), B41 (2500), B42 (3500), B43 (3700), B46 (5200), B48 (3500)	FDD — 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) TDD — B34 (2000), B38 (2600), B39 (1900), B40 (2300), B41 (2500), B42 (3500), B43 (3700), B46 (5200), B48 (3500)

5G NR Bands:	N/A	NSA and SA
		— n1 (2100), n2 (1900), n3 (1800), n5 (850), n7 (2600), n8 (900), n12 (700), n20 (800), n25 (1900), n26 (850), n28 (700), n38 (2600), n40 (2300), n41 (2500), n48 (3500), n66 (1700/2100), n71 (600), n77 (3700), n78 (3500), n79 (4900)
3G Bands:	B1, B2, B4, B5, B8, B9, B19	B1, B2, B3, B4, B5, B6, B8, B9, B19
Power:	LTE 23 dBm ± 1, DC-HSPA+ 23 dBm ± 1 (typical conducted)	LTE — LTE bands: 23 dBm ± 1 (typical conducted) — LTE HPUE: 25 dBm ± 1 (B41 standalone mode only) LTE + 5G NR ENDC — LTE + 5G NR: 20 dBm ± 1 (typical conducted) 5G NR — 5G NR bands: 23 dBm ± 1.5 (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 only with supported Branch routers)
GNSS/GPS:	Active GPS	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[†]	— AT&T — T-Mobile — Verizon
Public Safety Network Certifications:	— FirstNet Capable™ — Verizon Frontline	— FirstNet Capable™ — 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. A carrier listed in the approvals section means Ericsson Enterprise Wireless Solutions 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.
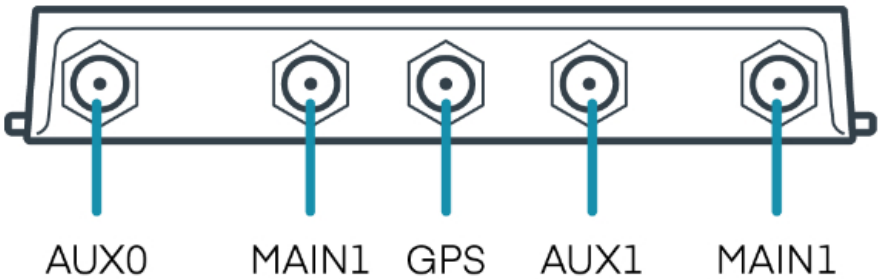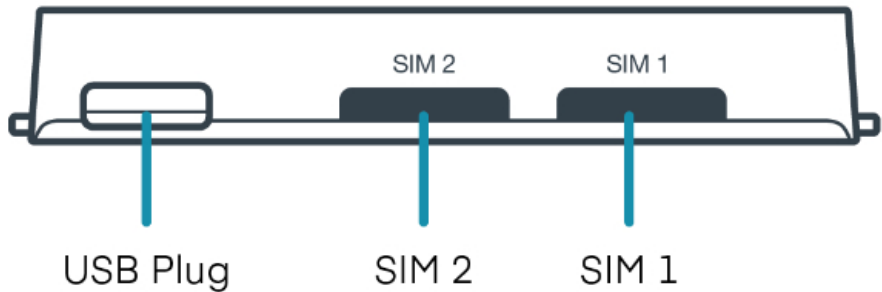
Physical Measurements & Features

Features — MC400-5GB

DIV   MIMO1   MIMO2   MAIN

USB Plug   SIM 2   SIM 1

Features — MC400-1200M-B

AUX0   MAIN1   GPS   AUX1   MAIN1

USB Plug   SIM 2   SIM 1

SIM Card Info — MC400-5GB

Nano SIM — 4FF
(12.3x8.8 mm)

Micro SIM — 3FF
(15x12 mm)

Mini SIM — 2FF
(25x15 mm)

SIM Card Info — MC400-1200M-B

Nano SIM — 4FF
(12.3x8.8 mm)

Micro SIM — 3FF
(15x12 mm)

Mini SIM — 2FF
(25x15 mm)

Ordering Guide

The Ericsson Cradlepoint MC400 modular modem is an accessory for Ericsson Cradlepoint routers and adapters that have an expansion slot to accept a modular modem. Activation and use of the MC400 modular modem requires an Ericsson Cradlepoint endpoint that is licensed to an Ericsson NetCloud service plan.

For details on the features available to a licensed Ericsson Cradlepoint router or adapter by service plan, refer to the summary on the NetCloud Serivce webpage and the detail in the NetCloud Service Features document.

NetCloud Packages for the Ericsson Cradlepoint MC400

REGION	MODEM	PACKAGE PLANS	PART NUMBER
All Regions: Asia-Pacific, Australia, Canada, European Union, New Zealand, United Kingdom, and United States	Cat 18 (1200 Mbps) — Includes 4 Cellular Antennas, White, 700 MHz - 2.7 GHz, SMA, 160 mm	Upgrade for CBA850 LTE Branch Adapter	BB-MC400-1200M-B

	Cat 18 (1200 Mbps) — No antennas	Upgrade for R1900 with RX30-MC, IBR1700, or COR Extensibility Dock	MA-MC400-1200M-B
	Cat 18 (1200 Mbps) — Includes 4 Cellular Antennas, Charcoal, 600 MHz - 6 GHz, SMA, 180 mm (Part #: 170801-000)	Upgrade for E300/E3000 Enterprise Branch Routers	BF-MC400-1200M-B
	5G — Includes 4 Cellular Antennas, Charcoal, 600 MHz - 6 GHz, SMA, 180 mm (Part #: 170801-000)	Upgrade for AER2200 Branch Routers	BA-MC400-5GB
	5G — No antennas	Upgrade for R920 with RX20-MC, R1900 with RX30-MC or IBR1700 Mobile Routers	MB-MC400-5GB
	5G — Includes 4 Cellular Antennas, Charcoal, 600 MHz - 6 GHz, SMA, 180 mm (Part #: 170801-000)	Upgrade for E300/E3000 Enterprise Branch Routers	BF-MC400-5GB
United States: Federal Government	Cat 18 (1200 Mbps) — No antennas	Upgrade for R1900 with RX30-MC, IBR1700, or COR Extensibility Dock	TAA-MA-MC400-1200M-B
	Cat 18 (1200 Mbps) — Includes 4 Cellular Antennas, Charcoal, 600 MHz - 6 GHz, SMA, 180 mm (Part #: TAA-170801-000)	Upgrade for E300/E3000 Enterprise Branch Routers	TAA-BF-MC400-1200M-B
	5G — Includes 4 Cellular Antennas, Charcoal, 600 MHz - 6 GHz, SMA, 180 mm (Part #: TAA-170801-000)	Upgrade for AER2200 Branch Routers	TAA-BA-MC400-5GB
	5G — No antennas	Upgrade for R1900 with RX30-MC or IBR1700 Mobile Routers	TAA-MB-MC400-5GB
	5G — Includes 4 Cellular Antennas, Charcoal, 600 MHz - 6 GHz, SMA, 180 mm (Part #: TAA-170801-000)	Upgrade for E300/E3000 Enterprise Branch Routers	TAA-BF-MC400-5GB

†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 Ericsson Enterprise Wireless Solutions 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.

Support & Warranty

The Ericsson Cradlepoint MC400 modular modem is only sold as an accessory.

— 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/mc400