



MC400 Modular Modem



Shown: MC400-1200M

Supported Products: MC400-1200M

- AER2200
- AER1600 Series
- COR IBR1700
- COR IBR900 Series with COR Extensibility Dock
- COR IBR600B/C Series with COR Extensibility Dock
- ARC CBA850

MC400-1200M LTE Advanced Pro/HSPA+

- Technology: Category 18 LTE Advanced Pro, DC-HSPA+
- The MC400-1200M is FirstNet Ready™
- Downlink Rates: LTE 1.2 Gbps, DC-HSPA+ 42.2 Mbps*
- Uplink Rates: LTE 150 Mbps, DC-HSPA+ 5.76 Mbps*
- MIMO: 2x2 or 4x4 MIMO
- 256 QAM support
- Frequency Bands:
 - LTE Bands
 - LTE FDD 1, 2(25), 3, 4(66), 5(26/18/19), 7, 8, 12(17), 13, 14, 20, 28, 29, 30, 32, 71
 - LTE TDD 38, 39, 40, 41, 42, 43, 46, 48
- Carrier Aggregation: Up to 5CA. [] indicates 4x4 MIMO
 - AT&T: 2,4,5,12,14,29,30,66,46; 3G 2, 5
 - 2CA DL carrier aggregation combinations:
CA_[2A]-[2A], CA_[2A]-[4A], CA_2A-5A, CA_2A-12A, CA_2A-14A, CA_2A29A, CA_2A-30A, CA_[2A]-46A, CA_[2A]-[66A], CA_2C, CA_[4A]-[4A], CA_4A-5A, CA_4A-12A, CA_4A-29A, CA_4A-30A, CA_[4A]-46A, CA_5A30A, CA_5A-66A, CA_5B, CA_12A-30A, CA_12A-66A, CA_12B, CA_14A30A, CA_14A-66A, CA_29A-30A, CA_29A-66A, CA_30A-66A, CA_[66A]-[66A], CA_66B, CA_66C
 - 3CA DL carrier aggregation combinations:
CA_2A-2A-5A, CA_[2A]-2A-12A, CA_2A-2A-14A, CA_2A-2A-30A, CA_2A2A-66A, CA_[2A]-4A-4A, CA_2A-[4A]-[4A], CA_[2A]-4A-5A, CA_2A-[4A]-5A, CA_[2A]-4A-12A, CA_2A-[4A]-12A, CA_2A-4A-30A, CA_2A-5A-30A, CA_[2A]-5A-66A, CA_2A-5A-[66A], CA_2A-12A-30A, CA_[2A]-12A-66A, CA_2A-12A-[66A], CA_2A-14A-30A, CA_2A-14A-66A, CA_2A-29A-30A, CA_2A-30A-66A, CA_2A-46C, CA_2A-66A-66A, CA_[4A]-4A-5A, CA_[4A]4A-12A, CA_4A-4A-30A, CA_4A-5A-30A, CA_4A-12A-30A, CA_4A-12B, CA_4A-29A-30A, CA_5A-30A-66A, CA_5A-66A-66A, CA_5A-66C, CA_12A30A-66A, CA_12A-[66A]-66A, CA_14A-30A-66A, CA_14A-66A-66A, CA_29A-30A-66A, CA_29A-66A-66A, CA_30A-66A-66A
 - 4CA DL carrier aggregation combinations:
CA_2A-2A-5A-30A, CA_2A-2A-5A-66A, CA_2A-2A-12A-30A, CA_2A-2A12A-66A, CA_2A-2A-14A-66A, CA_2A-2A-29A-30A, CA_2A-2A-66A-66A, CA_2A-4A-4A-12A, CA_2A-4A-5A-30A, CA_2A-4A-12A-30A, CA_2A-5A30A-66A, CA_2A-5A-66A-66A, CA_2A-5B-30A, CA_2A-5B-66A, CA_2A12A-30A-66A, CA_2A-12A-66A-66A, CA_2A-14A-30A-66A, CA_2A-14A66A-66A, CA_2A-29A-30A-66A, CA_[2A]-46D, CA_[4A]-46D, CA_4A-4A12A-30A, CA_5A-30A-66A-66A, CA_5B-30A-66A, CA_5B-66A-66A, CA_12A-30A-66A-66A, , CA_14A-30A-66A-66A, CA_29A-30A-66A-66A, CA_46D-[66A]
 - 5CA DL carrier aggregation combinations:
CA_2A-2A-46D, CA_2A-5B-30A-66A, CA_2A-5B-66A-66A, CA_2A-46D66A, CA_5B-30A-66A-66A, CA_46D-66A-66A
 - 2CA UL carrier aggregation combinations:
CA_2A-12A, CA_2A-5A, CA_4A-12A, CA_5A-66A, CA_5B, CA_12A-66A
 - Verizon (Pending): 2,4,5,13,66,48

- Fallback: WCDMA/DC-HSPA+ (42/5.76 Mbps): Bands 1, 2, 4, 5(19), 8
- Unlicensed Bands: LTE-LAA (5GHz): 46; CBRS (3.5GHz): 48**
- Power: LTE 23 dBm ± 1, DC-HSPA+ 23 dBm ± 1
- Antennas: four SMA male (plug), finger tighten only (maximum torque spec is 7 kgf/cm2)
- GPS: active GPS support
- SMS: SMS support
- Industry Standards & Certs: FCC, PTCRB, AT&T, FirstNet Ready, Verizon
- Requires modem doors that accommodate five antenna ports:
 - MA-MC400-1200M modem includes IBR1700 & COR Extensibility Dock doors, no antennas
 - BA-MC400-1200M modem includes AER2200 & AER1600 doors & 4 black antennas
 - BB-MC400-1200M modem includes CBA850 door & 4 white antennas

Supported Products: MC400-600M & LPx

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| — AER3100 Series | — COR IBR1700 | — COR IBR600B/C Series with
COR Extensibility Dock |
| — AER2200 | — COR IBR1100 Series with
Dual-Modem Dock | — ARC CBA850 |
| — AER2100 Series | — COR IBR900 Series with COR
Extensibility Dock | |
| — AER1600 Series | | |

MC400-600M-C-AT for use on FirstNet — LTE-Advanced/HSPA+ for US AT&T

- Technology: Category 12 LTE-Advanced Pro, DC-HSPA+
- The MC400-600M-C-AT is FirstNet Ready
- Downlink Rates: LTE 600 Mbps, DC-HSPA+ 42.2 Mbps*
- Uplink Rates: LTE 150 Mbps, DC-HSPA+ 5.76 Mbps*
- Frequency Bands: 2, 4, 5, 12, 14, 29, 30, 46, 66
- Carrier Aggregation:
 - CA_2A-2A-12A, CA_2A-29A-30A, CA_5B CA_2A-46A, CA_5A-30A-66A, CA_29A-30A-66A, CA_2A-4A-5A, CA_2A-66A-66A, CA_5A-46A, CA_2A-66C, CA_4A-4A-5A, CA_5A-66A-66A
 - CA_2A-4A-12A, CA_2C, CA_4A-4A-12A, CA_5A-66C, CA_66A-66B, CA_2A-4A-29A, CA_4A-4A-30A, CA_66A-66C, CA_2A-5A-30A, CA_4A-5A-30A, CA_12A-30A-66A,
 - CA_2A-5A-66A, CA_4A-12A-30A, CA_2A-12A-30A, CA_4A-29A-30A, CA_2A-2A-5A, CA_4A-46A
- Fallback: WCDMA/DC-HSPA+ (42/5.76 Mbps): Bands 2, 5
- Power: LTE 23 dBm ± 1, HSPA+ 23 dBm ± 1
- Antennas: two SMA male (plug), finger tighten only (maximum torque spec is 7 kgf/cm2)
- GPS: active GPS support

- SMS: SMS support
 - Industry Standards & Certs: FCC, PTCRB, AT&T, FirstNet
 - Modem Part Number: MC400-600M-C-AT
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MC400LP6 — LTE-Advanced/HSPA+ for North America & Europe

- Technology: Category 6 LTE-Advanced, DC-HSPA+
 - Downlink Rates: LTE 300 Mbps, DC-HSPA+ 42.2 Mbps*
 - Uplink Rates: LTE 50 Mbps, HSPA+ 5.76 Mbps*
 - Frequency Bands:
 - Bands 1-5, 7, 8, 12, 13, 17, 20, 25, 26, 29, 30, 41
 - Verizon: 2, 4, 5, 13 (XLTE support w/carrier aggregation)
 - AT&T: 2, 4, 5, 12/17, 29, 30
 - Sprint: 25, 26, 41 (LTE Plus Support)
 - T-Mobile: 2, 4, 12 (T-Mobile Wideband LTE Support)
 - Carrier Aggregation:
 - 1+ 8
 - 2+ 2/5/12 (17 w/MFBI)/13/29
 - 3+ 7/20
 - 4+ 4/5/12 (17 w/MFBI)/13/29
 - 5+ 2/4/30
 - 7+ 3/7/20
 - 8+ 1
 - 12 (17 w/MFBI) + 2/4/30
 - 13+ 2/4
 - 20+ 3/7
 - 30+ 5/12 (17 w/MFBI)
 - 41+ 41
 - Fallback: WCDMA/DC-HSPA+ (42/5.76 Mbps): Bands 1, 2, 3, 4, 5, 8
 - Power: LTE 23 dBm ± 1, HSPA+ 23 dBm ± 1
 - Antennas: two SMA male (plug), finger tighten only (maximum torque spec is 7 kgf/cm2)
 - GPS: active GPS support
 - SMS: SMS support
 - Industry Standards & Certs: CE, FCC, GCF-CC, IC, PTCRB, AT&T, Sprint, Verizon
 - Modem Part Number: MC400LP6
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MC400LP5 — LTE Advanced/HSPA+ for Asia Pacific and Middle East

- Technology: FDD/TDD (Category 6) LTE Advanced, DC-HSPA+
 - Downlink Rates: LTE 300 Mbps, DC-HSPA+ 42.2 Mbps*
 - Uplink Rates: LTE 50 Mbps, DC-HSPA+ 5.76 Mbps*
 - Frequency Bands:
 - LTE Bands: 1, 3, 5, 7, 8, 18, 19, 21, 28, 38, 39, 40, 41
 - TD-SCDMA 39
 - Carrier Aggregation:
 - 1 + 8/18/19/21
 - 3 + 5/7/19/28
 - 5 + 3/7
 - 7 + 3/5/7/28
 - 8 + 1
 - 18 + 1
 - 19 + 1/3/21
 - 21 + 1/19
 - 28 + 3/7
 - 38 + 38
 - 39 + 39
 - 40 + 40
 - 41 + 41
 - Fallback: WCDMA/DC-HSPA+ (42/5.76 Mbps): Bands 1, 5, 6, 8, 9, 19
 - Power: LTE: 23 dBm ± 1; DC-HSPA+: 23 dBm ± 1
 - Antennas: two SMA male (plug), finger tighten only (maximum torque spec is 7 kgf/cm²)
 - GPS: active GPS support
 - SMS: SMS support
 - Industry Standards & Certs: CE, GCF-CC, RC Australia, others pending
 - Modem Part Number: MC400LP5
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MC400LP4 — 4G LTE/HSPA+ for North America

- Technology: Category 4 LTE, DC-HSPA+
- Downlink Rates: LTE 150 Mbps, DC-HSPA+ 42.2 Mbps*
- Uplink Rates: LTE 50 Mbps, DC-HSPA+ 5.76 Mbps*
- Frequency Bands:
 - LTE: Band 2 (1900 MHz), Band 4 – AWS (1700/2100 MHz), Band 5 (850 MHz), Band 13 (700 MHz), Band 17 (700 MHz)
 - DC-HSPA+/UMTS Rel. 9, Cat 24: Bands 5 and 2 (850/1900 MHz)

- Power: LTE 23 dBm +/- 1, DC-HSPA+ 23 dBm +/- 1
 - Antennas: two SMA male (plug), finger tighten only (maximum torque spec is 7 kgfcm)
 - Industry Standards & Certs: FCC, WiFi Alliance (AER1600 only), Verizon, AT&T, PTCRB, carrier Private Networks, IC
 - SIM: two 2FF slots (secured)
 - Modem Part Number: MC400LP4
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MC400LP3-EU — 4G LTE/HSPA+ for Europe

- Technology: LTE, HSPA+
 - Downlink Rates: LTE 100 Mbps, HSPA+ 21.1 Mbps*
 - Uplink Rates: LTE 50 Mbps, HSPA+ 5.76 Mbps*
 - Frequency Bands:
 - LTE Band 1 (2100 MHz), Band 3 (1800 MHz), Band 7 (2600 MHz), Band 8 (900 MHz), Band 20 (800 MHz)
 - HSPA+/UMTS (800/850/900/1900/2100 MHz)
 - GSM/GPRS/EDGE Quad-Band (850/900/1800/1900 MHz)
 - Power: LTE Band 1/3/8/20: 23 dBm ±1; LTE Band 7: 22 dBm ±1; HSPA+: 23 dBm ±1 (typical conducted)
 - Antennas: two SMA male (plug), 1 dBi (LTE), 2 dBi (Cellular/PCS) gain; finger tighten only (maximum torque spec is 7 kgf/cm²)
 - GPS: active GPS support
 - Industry Standards & Certs: CE, GCF-CC
 - Modem Part Number: MC400LP3
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MC400LPE-AT — 4G LTE/HSPA+/EVDO for AT&T

- Technology: LTE, HSPA+, EVDO Rev A
 - Downlink Rates: LTE 100 Mbps, HSPA+ 21.1 Mbps, EVDO 3.1 Mbps*
 - Uplink Rates: LTE 50 Mbps, HSPA+ 5.76 Mbps, EVDO 1.8 Mbps*
 - Frequency Bands:
 - LTE Band 2 (1900 MHz), Band 4 – AWS (1700/2100 MHz), Band 5 (850 MHz), Band 13 (700 MHz), Band 17 (700 MHz), Band 25 (1900 MHz)
 - HSPA+/UMTS (850/900/1900/2100 MHz, AWS)
 - GSM/GPRS/EDGE (850/900/1800/1900 MHz)
 - CDMA EVDO Rev A/1xRTT (800/1900 MHz)
 - Power: LTE: 23 dBm ±1; HSPA+: 23 dBm ±1; EVDO: 24 dBm +0.5/-1 (typical conducted)
 - Antennas: two SMA male (plug), 1 dBi (LTE), 2 dBi (Cellular/PCS) gain; finger tighten only (maximum torque spec is 7 kgf/cm²)
 - GPS: active GPS support
 - Industry Standards & Certs: PTCRB, FCC, IC, AT&T
 - Modem Part Number: MC400LPE
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MC400LPE-GN — 4G LTE/HSPA+/EVDO (generic – for use on T-Mobile and US Cellular in the U.S. and Rogers, Bell, & TELUS in Canada)

- Technology: LTE, HSPA+, EVDO Rev A
 - Downlink Rates: LTE 100 Mbps, HSPA+ 21.1 Mbps, EVDO 3.1 Mbps*
 - Uplink Rates: LTE 50 Mbps, HSPA+ 5.76 Mbps, EVDO 1.8 Mbps*
 - Frequency Bands:
 - LTE Band 2 (1900 MHz), Band 4 (AWS), Band 5 (850 MHz), Band 13 (700 MHz), Band 17 (700 MHz), Band 25 (1900 MHz)
 - HSPA+/UMTS (850/900/1900/2100 MHz, AWS)
 - GSM/GPRS/EDGE (850/900/1800/1900 MHz)
 - CDMA EVDO Rev A/1xRTT (800/1900 MHz)
 - Power: LTE: 23 dBm ±1; HSPA+: 23 dBm ±1; EVDO: 24 dBm +0.5/-1 (typical conducted)
 - Antennas: two SMA male (plug), 1 dBi (LTE), 2 dBi (Cellular/PCS) gain; finger tighten only (maximum torque spec is 7 kgf/cm²)
 - GPS: active GPS support
 - Industry Standards & Certs: PTCRB, FCC, IC
 - Modem Part Number: MC400LPE
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MC400LPE-SP — 4G LTE/HSPA+/EVDO for Sprint

- Technology: LTE, HSPA+, EVDO Rev A
 - Downlink Rates: LTE 100 Mbps, HSPA+ 21.1 Mbps, EVDO 3.1 Mbps*
 - Uplink Rates: LTE 50 Mbps, HSPA+ 5.76 Mbps, EVDO 1.8 Mbps*
 - Frequency Bands:
 - LTE Band 2 (1900 MHz), Band 4 – AWS (1700/2100 MHz), Band 5 (850 MHz), Band 13 (700 MHz), Band 17 (700 MHz), Band 25 (1900 MHz)
 - HSPA+/UMTS (850/900/1900/2100 MHz, AWS)
 - GSM/GPRS/EDGE (850/900/1800/1900 MHz)
 - CDMA EVDO Rev A/1xRTT (800/1900 MHz)
 - Power: LTE: 23 dBm ±1; HSPA+: 23 dBm ±1; EVDO: 24 dBm +0.5/-1 (typical conducted)
 - Antennas: two SMA male (plug), 1 dBi (LTE), 2 dBi (Cellular/PCS) gain; finger tighten only (maximum torque spec is 7 kgf/cm²)
 - GPS: active GPS support
 - Industry Standards & Certs: FCC, Sprint
 - Modem Part Number: MC400LPE
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MC400LPE-VZ – 4G LTE/HSPA+/EVDO for Verizon

- Technology: LTE, HSPA+, EVDO Rev A
- Downlink Rates: LTE 100 Mbps, HSPA+ 21.1 Mbps, EVDO 3.1 Mbps*
- Uplink Rates: LTE 50 Mbps, HSPA+ 5.76 Mbps, EVDO 1.8 Mbps*
- Frequency Bands:
 - LTE Band 2 (1900 MHz), Band 4 – AWS (1700/2100 MHz), Band 5 (850 MHz), Band 13 (700 MHz), Band 17 (700 MHz), Band 25 (1900 MHz)
 - HSPA+/UMTS (850/900/1900/2100 MHz, AWS)
 - GSM/GPRS/EDGE (850/900/1800/1900 MHz)
 - CDMA EVDO Rev A/1xRTT (800/1900 MHz)
- Power: LTE: 23 dBm \pm 1; HSPA+: 23 dBm \pm 1; EVDO: 24 dBm +0.5/-1 (typical conducted)
- Antennas: two SMA male (plug), 1 dBi (LTE), 2 dBi (Cellular/PCS) gain; finger tighten only (maximum torque spec is 7 kgf/cm2)
- GPS: active GPS support
- Industry Standards & Certs: FCC, Verizon
- Modem Part Number: MC400LPE

* Theoretical

** To be enabled with a future modem software update.

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