

AscentModem 5G

Multi-platform 5G Connectivity

The Ascent Modem 5G is an industrial strength 5G modem that delivers seamless, ultra-fast 5G and 4G/LTE cellular connectivity. With dual SIM flexibility, Ascent Modem 5G enables multi-network and high-speed internet access for users in fixed or mobile applications.

Supporting 4x4 MIMO with four individual SMA ports, external antenna installation allows for even more flexibility and performance improvements.

Ultra Fast Throughput, Worldwide

5G/4G LTE Cellular Modem

Kognitive Networks' Ascent Modem 5G brings ultra-fast 5G and fallback 4G/LTE connectivity to a wide range of environments.



Optimized Connectivity

C-Band support and carrier aggregation for up 120 MHz channel bandwidth



Advanced 5G Technology

Offers 5G connectivity with 4G/ LTE fallback, ensuring consistent high-speed internet access in urban and remote locations.



Dual SIM with Comprehensive Compatibility

Features dual SIM slots and USB-C for data /power, compatible with Linux, Android, Windows 10/11, and EdgeOS



Optimized for High Throughput

Supports MIMO carrier aggregation for superior data transmission rates.

Versatile and Portable 5G

Compact and Durable

Rugged aluminum design with external antenna ports, Ascent Modem has removable feet and heatsink for mechanical mounting in tight locations Comprehensive Connectivity
5G SA/NSA, 4G LTE with 4×4 MIMO

Technical Specifications



5G NR SA	NR Bands	n1/n2/n3/n5/n7/n8/n12/n13/n14/n18/n20/n25/n26/n28/n29/n30/ n38/n40/n41/n48/ n66/n70/n71/n75/n76/n77/n78/n79
	DL 4 x 4 MIMO	n1/n2/n3/n7/n25/n30/n38/n40/n41/n48/n66/n70/n77/n78/n79
	UL2x2MIMO	n38/n41/n48/n77/n78/n79
5G NR NSA	NR Bands	n1/n2/n3/n5/n7/n8/n12/n13/n14/n18/n20/n25/n26/n28/n29/n30/ n38/n40/n41/n48/ n66/n70/n71/n75/n76/n77/n78/n79
	DL 4 x 4 MIMO	n1/n2/n3/n7/n25/n30/n66/n38/n40/n41/n48/n70/n77/n78/n79
LTE	FDD Bands	B1/B2/B3/B4/B5/B7/B8/B12/B13/B14/B17/B18/B19/B20/B25/B26/ B28/B29/ B30/B32/B66/B71
	TDD Bands	B34/B38/B39/B40/B41/B42/B43/B46(LAA)/B48
	DL 4 x 4 MIMO	B1/B2/B3/B4/B7/B25/B30/B38/B40/B41/B42/B43/B48/B66
WCDMA	Bands	B1/B2/B4/B5/B8/B19
GNSS	RX Bands	GPS/GLONASS/BDS/Galileo/QZSS



Cellular WAN Interface	5G SA / NSA, 4G LTE - 4x4 MIMO	
SIM Slots	2x nano SIM	
Throughput	Peak DL/UL Mbps: 5G NSA 3400/550, 5G SA 2400/900, LTE 1600/200 CAT-19/CAT-18	
Connectors	4x SMA-F Cellular, 2-pin Molex External Power, USB Type C	
Power & Data	USB3.2, backwards compatible with USB2.1 [Opt. Ext. Power: +9 VDC to +24 VDC]	
Power Consumption	5W nominal, 8W max	
Physical	113.4mm x 67.3mm x 27 mm / 4.5" x 2.75" x 1.1" - 0.45 lbs / 200g	
Environmental	Operating temp: -10 to +50 C; Humidity up to 95%, non-condensing	
Certifications	CE, FCC, RoHS, PTCRB	
US Carrier Certifications	Certified for use on ATT, T-Mobile, Verizon	
Warranty	1 year limited	