



**Deploy next-generation products with a global module that supports 5G NR, as well as low and high power mmWave antenna modules**

The EM9190 module is part of the [EM Series](#) offering global 5G connectivity. Designed in an M.2 form factor, the EM9190 is compatible with Sierra Wireless's EM7690 4G LTE-A Pro module, to help facilitate the migration and differentiation between 4G LTE and 5G.

This 5G NR Sub-6 GHz and mmWave embedded module delivers up to 5.5Gbps downlink speed and 3Gbps uplink speed. With automatic 4G and 3G fallback networks, and integrated GNSS receiver (GPS, GLONASS, BeiDou, and Galileo satellite systems supported), the EM9190 is applicable to a wide range of IoT applications such as industrial routers, home gateways, industrial and consumer laptops, rugged tablet PCs, video surveillance and digital signage.

## Specifications

<b>5G NR</b>	
<b>Category</b>	5G NR Sub-6 and mmWave
<b>Frequency Bands</b>	Bands Sub-6: n1, n2, n3, n5, n7, n8, n12, n20, n25, n28, n38, n40, n41, n48, n66, n71, n77, n78, n79, mmWave: n257, n258, n260, n261
<b>4G LTE</b>	
<b>Category</b>	Cat-20
<b>Frequency Bands</b>	B1, B2, B3, B4, B5, B7, B8, B12, B13, B14, B18, B19, B20, B21, B25, B26, B28, B29, B30, B32, B34, B38, B39, B40, B41, B42, B43, B46, B48, B66, B71
<b>DATA SPEED</b>	
<b>Peak Download Rate</b>	5.5 Gbps
<b>Peak Upload Rate</b>	3Gbps
<b>LOCATION SERVICES</b>	
<b>Satellite Systems</b>	Galileo, Glonass, GPS, Beidou (Bands: L1 and L5)

<b>EMBEDDED SOFTWARE</b>	
<b>System Drivers</b>	Windows® 10, Linux, Android RIL
<b>INTERFACES</b>	
<b>USB</b>	USB 3.1
<b>PCIe</b>	PCIe generation 3 (or 2), 1 lane
<b>HARDWARE</b>	
<b>Dimensions</b>	30x52x2.38mm
<b>APPROVALS</b>	
<b>Carrier</b>	AT&T (FirstNet), NTT Docomo, T-Mobile, Verizon
<b>Planned Carrier</b>	Telstra
<b>Regulatory</b>	FCC, GCF, IC, PTCRB, EU RED, JATE/Telec