MOFI550-5GXeLTE-EM7690
CAT 20 4G/LTE Router with 5 x Carrier Aggregation
Note: this is not a 5G router

Spec Sheet

Rugged Enterprise Router with Embedded Modem
with LTE Advanced (LTE 2) Technology & 5 x Carrier Aggregation
(LTE2 is fully backwards compatible with LTE)
This is one of the fastest LTE router on the planet!
Certified with Verizon, AT&T, T-Mobile/Sprint, IC, PTCRB and more.

LTE Bands: B1, B2, B3, B4, B5, B7, B8, B9, B12, B13, B14, B17, B18, B19, B20, B21, B25, B26, B28, B29, B30, B32, B34, B38, B39, B40, B41, B42, B43, B46, B48, B66, B71
WCDMA Bands: B2, B4, B5
850MHz, 1700MHz/2100Mhz, 1900MHz
This EM7690 uses the Sierra Wireless EM7690 CAT20 Cellular module
Regulatory Specs applied to module: CE, FCC, GCG, NCC, PTCRB

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OVERVIEW

The MOFI5500-5GXeLTE-EM7690 is a high performance mission critical enterprise rugged metal router with a cellular embedded modem that supports the latest LTE Advanced technology made for businesses or customers that want the best signal reception and speed from AT&T, T-Mobile, Verizon, Sprint and many providers around the world including Bell, Rogers, Telus, Fido, Koodo, Videotron, MTS, Sasktel, Freedom Mobile and more. Since this router includes bands 14, 66 and 71 and has carrier aggregation, customers using the new 600MHz frequency B71 will get the best performance with T-Mobile and many other providers including many in Canada. For Verizon customers, this new model has the latest in Verizon technology that includes XLTE frequencies and supports carrier aggregation that sets it apart from any other product offered. Note this router is not 5G cellular capable.

Summary of sub models available:

MOFI5500-5GXeLTE (this model has no cellular module and cannot work with a SIM card)

MOFI5500-5GXeLTE-7411

MOFI5500-5GXeLTE-EM7411-GPS (this can process GPS signal as well)

MOFI5500-5XeLTE-EM7411-DUAL (has 2 x EM7690 cellular module to run 2 SIM cards at the same time)

MOFI5500-5GXeLTE-7690 (uses a CAT20 4G/LTE cellular module but note does not do 5G)

(this EM7690 model is what you are reading specs on and has 1 x EM7690 cellular modem with 5 x carrier aggregations)

MOFI5500-5GXeLTE-9191-5G-SUB6 (can do 5G sub 600 frequencies as well as 4G/LTE)

With a compact wall mountable design, the MOFI5500-5GXeLTE-EM7690 is what installers asked for in a rugged metal enclosure made to work in a 24/7 environment. Business software includes Robust Fail Over, OpenVPN Server, IP Sec, Remote Cloud Management Interface, SMS Router Control via Your Cell Phone, Multi WAN, Band Locking, Advance Bandwidth/Speed Controls plus many more features including the ability to obtain a public static IP address on any provider direct from Mofi Network called Mofi Cloud.

Made to work for M2M applications, the MOFI5500-5GXeLTE-EM7690 router packs a powerful punch with its 4 x 5dBi Wi-Fi external antennas that is able to push the Wi-Fi signal as far as possible while maintaining the fastest speeds. Also includes 4 x 5dBi 3G/4G/LTE cellular antennas for the cellular signal that is able to get the strongest signal reception possible. You must have an active service plan from your provider to use. Note also that you must supply you own sim card and get a compatible plan to use,

Advanced Wireless Security
The MOFI5500-5GXeLTE-EM7690 creates a secure Wi-Fi® network by supporting the latest wireless security features to prevent unauthorized access. It supports many security options including 64/128-bit WEP, WPA, and WPA2 + more commercial grade security options to ensure that you will be able to secure your Wi-Fi network, regardless of your client devices. In addition, the 3G/4G/LTE mobile router utilizes dual active firewalls (SPI and NAT) to prevent potential attacks from across the Internet.

Easy to install and Use
Simply insert your SIM card in the side and run the wizard to set up your configuration you require, such as Wi-Fi name, password and provider you want to use. If you want to monitor bandwidth use, slow down the internet, create multiple Wi-Fi networks, obtain a static public IP address and more, all that is required are a few clicks. For those that use the router in a critical situation, enable the MOFI Watchdog system that will reboot the router and send alerts if any issue is detected or just want a heart beat signal from the router at a selected interval.

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MAIN FEATURES

- Multi Provider Category 20 Solution with 5 x carrier aggregation
  (Works with Verizon, AT&T, T-Mobile, all Canadian providers and other providers using the Sierra Wireless EM7690 cellular module.
- GPS Capable
- World wide band support (basically compatible with almost all networks in the world from USA, Canada, Mexico, Australia, India, Germany and almost everywhere else.
- Built in 3G/4G/LTE Cellular Embedded Modem with multiple LTE bands including the 600MHz range
- Ability to do band locking/advanced band filtering as well as automatic speed test to lock on fastest bands
- Advanced bandwidth monitoring, speed, bandwidth limits and restriction options
- SMS Router Control via your cell phone allows you to reboot, get status & more via text message
- Ability to see signal as well as to force a specific band if available to prevent unintentional band hopping
- Wall mountable small rugged metal design great for RV's, ATMs, Kiosks, Buses, Taxi Cabs & many other applications that require a stable internet connection with watchdog mission critical performance
- Remote Central Fleet Management Cloud Interface that works on private IP's as well
- Wireless Bride/Repeater mode to extend your wireless range and/or have the ability to use an Ethernet connection with any Wi-Fi signal including those from a hotspot device
- Mofi to Mofi VPN mode to allow a secure encrypted connection between offices.
- Ability to assign a static public IP address for any device that requires one (many providers do not give you a public IP address and you will need this for your DVR or anything that you need a direct connection from the outside.
- Android & iPhone USB Tethering Compatible (Plug in your Android phone via USB port to enable USB Tethering)
- MOFI Ad Blocker/Parental control built in to prevent annoying pop ups and increase the speed of your online experience.
- Full bandwidth monitoring where you can view the usage of every device connected and have ability to limit bandwidth/speed and other advance functions
- Parental screen to set automatic limit or access by time on any device connected
- Video games optimized mode for best online gaming experience including auto port forwarding for all Xbox, PlayStation and more.
- Super Fast (wireless speeds up to 600mb/s full N speeds) and up to 1000 ft range and up to 1734mb/s on the Wi-Fi AC. (4 x 4 high performance solution)
- Build in signal amplification on all the Wi-Fi including the Wi-Fi AC which most other routers do not have. What this means is the one MOFI router can power almost every house or location up to 8000sq ft without the need to have a repeater or other router. All components used are premium to ensure the best possible speed and range.
- Virtual Private Network (VPN) + IPSec and OpenVPN Support
- Multi-Wan with fail safe (if one connection fails, can set to auto connect to another)
- Wi-Fi Fail Over (great for boater or anyone that gets free Wi-Fi and only use 4G/LTE when not in range)
- Fail Safe Boot Loader than can restore router on bad flash or failed firmware update
- USB Print Server to allow a regular USB inkjet printer become a network printer
- Full Advance Quality of Service (QOS Support)
- 4 x Detachable Wi-Fi 5dBi antennas allowing flexible gain performance antennas both Wi-Fi
- Includes 4 x Cellular Wide Band Antennas for the fastest LTE speeds possible
- Dynamic DNS full support including customized option
- True DMZ not Pseudo DMZ Zone

- True IP-Pass-Through
- VPN Services & Termination - Device to Cisco, Linux, Juniper IPSec, L2TP & more
- Standalone VPN & DHCP Server
- Free Toll Free Technical Support and many more features included that is not listed here
- Custom firmware solution for customers requiring multiple units with included Cloud Management

Internal Module Specs: Sierra Wireless EM7690
Regulatory for Module: CE, FCC, GCF, IC, NCC, PTCRB

LTE Category 20 with DL up to 2000Mbs (2Gpbs), 211Mbps UL
HSPA+: 42Mbps DL, 5.76 UL
TD-HSDPA/HSUPA: 2.8Mbps DL, 2.2Mbps UL
EDGE: Multi Slot Class 12 236.8 kbps DL & UL
GPRS: Multi Slot Class 10 85.6 kbps DL & UL
Include GPS Support: GPS, GLONASS, Beidou, Galileo

Frequency Bands:
LTE Band B1
LTE Band B2 (1900MHz)
LTE Band B3
LTE Band B4 - AWS (1700MHz),
LTE Band B5 (850MHz),
LTE Band B7 (2600MHz)
LTE Band B8
LTE Band B9
LTE Band B12 (700MHz)
LTE Band B13 (700MHz)
LTE Band B14 (700MHz) (FIRST NET)
LTE Band B17 (700MHz)
LTE Band B18
LTE Band B19
LTE Band B20
LTE Band B21
LTE Band B25 (1900MHz)
LTE Band B26 (850MHz)
LTE Band B28
LTE Band B29
LTE Band B30
LTE Band B32
LTE Band B34
LTE Band B38
LTE Band B39
LTE Band B40
LTE Band B41 (TD 2500MHz)
LTE Band B42 (3500MHz)
LTE Band B43 (3700MHz)
LTE Band B48 (3500MHz)
LTE Band B66 (1700MHz)
LTE Band B71 (600MHz)

WCDMA Bands
B2, B4, B5

UMTS (850//1700/1900/2100 MHz)
GSM/GPRS/EDGE (850/1900 MHz)

Network Support

- 3G/4G/LTE/LTE-A connectivity via the built in cellular modem (cat20 EM7690)
- 5 x Carrier Aggregation
- DHCP, PPPoE, PPTP, PPP, ATM, Relay, DHCP and Static IP connectivity
- MAC cloning support, MAC filtering including default expect and deny
- IP/TCP/UDP/ICMP Application support
- Network Address Translation (NAT)
- DHCP Server/client DNS Relay
- Full Dynamic DNS support including custom support
- IPV4 and IPV6 Support
- Standalone DHCP Server

Wireless Support

- Modulation Support
- IEEE802.11b (DSSS): DBPSK: 1 Mbps, DQPSK: 2 Mbps, CCK: 5.5/11 Mbps
- IEEE802.11g (OFDM/DSSS): BPSK: 6/9 Mbps, QPSK: 12/18 Mbps, QAM-16: 24/36 Mbps, QAM-64 : 48/54 Mbps
- IEEE802.11n (OFDM/DSSS): BPSK, QPSK, QAM-16, QAM-64
- Frequency Band 2.4GHz – 2.4835GHz
  Frequency Band 5150GHz – 5885GHz Wi-Fi AC
- Wireless Security Support: WEP (64/128 bit), WPA-PSK Personal / WPA2-PSK Personal, TKIP, AES, Stealth AP (Hidden ESSID, Deny any Access), MAC Address Filtering, WPA-EAP, WPA2-EAP

Wireless Transmit Power

- 802.11b (1 antenna): 30bBm +/- 1 dBm
- 802.11g (1 antenna): 30bBm +/- 1 dBm
- 802.11n (4 antenna): 30bBm +/- 1 dBm
- 802.11AC (4 antenna): 30bBm +/- 1 dBm

PHYSICAL SPECIFICATION

Memory:
32MB FLASH
512MB RAM

Power Adaptor: 3.5AMPS

LED Indicators

- 1 x Power LED/Booting Status LED
- 4 x Ethernet Link Status LED
- 1 x WAN Link Status
- 1 x Wireless LAN Link Status LED
- 1 x Internet or 3G/4G/LTE Connection Status LED

External Connectors

- 1 x DC Jack for Power Input (110-220V input, 12V DC output, 12-30VDC Range) (Recommended inline fuse for vehicle installations: 3A fast-blow)
- 4 x RJ45 for LAN (Yellow) ports 10/100/1000mb/s GIGABIT (can be used as multi WAN ports)
- 1 x RJ45 for WAN (Blue) port 10/100/1000mbs GIGABIT (can be used as a LAN port)
- 1 x RJ45 (RED) for CONSOLE Connection for serial interface
- 1 x LED Switch to turn off all LED's
- 1 x SIDE USB 3.0 Port
- 1 x BACK USB 2.0 Port
- 1 x Factory Default Reset
- 4 x 5 dBi Premium External SMA Antennas for Wi-Fi
- 4 x 5 dBi External SMA Antennas for 3G/4G/LTE cellular signal
- 1 x 2FF SIM Slot (full size SIM card), You must get SIM card from provider or current device (SIM Card Adaptor Kit Available and might be Included in Package)

Physical Dimension

- 260 mm x 140 mm x 32 mm (10in x 5.5in x 1.3in)
- Weight 740gram or 1.6 lb

Temperature

- Operating: -30 to 70 degrees Celsius (-22 to 158 degrees Fahrenheit)
- Storage: -40 to 85 degrees Celsius (-40 to 185 degrees Fahrenheit)

Humidity

- Operating: 10% to 85% Relative Humidity (Non-Condensing)
- Non-Operating: 5% to 95% Relative Humidity (Non-Condensing)

NOTE : Specifications subject to change without prior notice.