

# Versa CAT12 LTE Module

Versa appliances can be optionally equipped with factory-installed integrated (internal) enterprise grade CAT12 LTE module. Versa's CAT12 LTE module supports LTE Advanced Pro specification providing high-performance WAN connectivity experience over LTE networks. CAT12 LTE based WAN links can be used as either a primary link or backup link. As with all components of Versa's portfolio and solutions, the Versa CAT12 LTE Module is centrally managed and controlled by Versa Director with network and device analytics provided by Versa Analytics.

## The Versa Wireless Advantage

Versa's embedded CAT12 LTE Module is a global modem based on industry-leading and industry-proven CAT12 LTE Advanced Pro module and chipset used in commercially available enterprise-grade products today. The embedded Versa CAT12 LTE module provides unique advantages of performance, deployment flexibility and agility. Here are some of the key highlights:

### CAT12 LTE-Advanced Pro Performance

The integrated Versa CAT12 LTE Module is capable of CAT12 class Advanced Pro LTE connectivity with downlink performance of up to 600 Mbps and uplink performance of up to 150 Mbps. With Carrier Aggregation, LTE Advanced Pro module delivers 2x the bandwidth of CAT6 modems. Higher performance facilitates the use of mobile links either as a primary WAN link or as backup. LTE aware VOS software offers ways to intelligently manage traffic and adaptive probing over LTE links to make most effective use mobile data plans and mobile connectivity. See more on this below.

The Versa CAT12 LTE module supports over the air (OTA) upgrades to ensure the latest firmware and software can be published to the device. It also supports Secure Boot for tamper protection. In deployments where LTE Advanced Pro level connectivity is not available, the Versa CAT12 LTE Modem will auto- scale back to LTE Advanced, LTE, 4G modes depending on mobile network availability, wireless plan purchased and other factors.

Versa CSG appliances can be deployed with up to 2 integrated LTE Advanced Pro modules. Specific SKU's facilitate ordering units with one or more factory installed CAT12 LTE modems.

In addition to the internal modems, Versa appliances also support USB-connected LTE modems for deployments that require more than 2 simultaneous LTE modems.

### LTE based SD-WAN Connections

VOS comes with built-in capabilities to auto-recognize and auto-configure embedded LTE modules. As a SIM card is inserted and mobile network connectivity is achieved, VOS will start leveraging LTE modems for data plane, management plane and control plane connectivity purposes.

VOS manages individual LTE interfaces based on specific deployment configurations as a primary WAN interface as well as a backup WAN link that will only be activated upon failure or SLA-violation of SD-WAN traffic steering policies. Any or all features (routing, SD-WAN, Security) of VOS can be configured to leverage the LTE interfaces. Traffic policies can be used to apply fine granular traffic control to select which traffic profiles can use LTE interfaces and which cannot, and under what circumstances.

In addition to supporting fully featured SD-WAN services over LTE interface, VOS also has the contextual intelligence of identifying volume and rate of data and control traffic to ensure effective utilization of LTE network resources. Examples of this intelligence and advanced control are: LTE Focused Dynamic SD-WAN Probes, Adaptive Probing capabilities and suppression.

### SIM Cards Support

Versa appliances come equipped with 2 nano-SIM card slots, each SIM slot maps to the specific LTE module. If the unit is ordered with one LTE modem, the modem is installed and identified on internal slot #1. If the unit is ordered with two LTE modems, then both embedded mobile slots within the appliance are populated, and each SIM card slots map to each LTE slot accordingly. SIM cards are externally accessible, located behind easily identifiable SIM slot doors. SIM slot doors are designed to ensure you can easily insert or remove SIM cards while still keeping SIM cards secured.

Versa appliances do not ship with SIM cards pre-installed. Customers will need to purchase to purchase SIM card(s) from an available mobile provider. Versa recommends using pre-activated SIM cards to ensure the most positive experience in deployment.

Once inserted, the SIM cards are auto detected and connect to the recognized LTE network. SIM cards can be hot swapped, enabling a fast and easy transition from one mobile network provider to another. Each appliance will auto-detect the new SIM card and auto-connect to the appropriate cellular network.

### Agility

Once ordered with the right SKU, Versa appliances come with LTE Advanced Pro module pre-installed at the factory, ready to use in the field. Versa CAT12 LTE modules are certified to be operated across multiple regions globally. Please refer to hardware documentation for more details.

The Versa LTE Advanced Pro Module is firmware based. Customers can also upgrade or replace modem images as necessary to address their specific network requirements. The Versa CAT12 LTE module will identify the appropriate firmware image and mobile operator settings based on the details detected from the inserted SIM. Firmware based operation allows Versa modems to connect to mobile networks with flexibility and adopt updates if/when needed by the carrier.

### Region Support

The factory installed Versa CAT12 LTE Module is a global modem simplifying ordering and deployment process using one SKU to provide global coverage. You can see the supported mobile network and frequency band coverage by each orderable modem in the Specifications Table below.

## Specifications

Specifications of Versa CAT12 LTE modem for CSG700 revision-2 platforms:

Bands	1	2	3	4	5	6	7	8	9	12	13	14	18	19	20	25	26	28	29	30	38	39	40	41	42	43	48	66	71		
LTE	F	F	F	F	F		F	F		F	F	F	F	F	F	F	F	F	F	F	F	F	F	T	T	T	T	F	F		
UMTS	Y	Y		Y	Y	Y		Y	Y					Y																	
Peak download rate: 600 Mbps																															
Peak upload rate: 150 Mbps																															
GNSS: Galileo, Glonass, GPS, BeiDou																															

F: FDD, T: TDD, Yes

Specifications of Versa CAT12 LTE modem for CSG1300 and CSG1500 platforms:

Bands	1	2	3	4	5	6	7	8	9	12	13	18	19	20	26	28	29	30	32	41	42	43	46	48	66	
LTE	F	F	F	F	F		F	F	F	F	F	F	F	F	F	F	F	F	F	T	T	T	T	T	F	
UMTS	Y	Y		Y	Y	Y		Y	Y				Y				N/A						N/A			
Peak download rate: 600 Mbps																										
Peak upload rate: 150 Mbps																										
GNSS: Galileo, Glonass, GPS, BeiDou																										

F: FDD, T: TDD, Yes

### Applicable Platforms

CSG700 (revision-2), CSG1300, CSG1500

### Ordering Information

The Versa CAT12 LTE Advanced Pro module adds wireless WAN capability to Versa appliances. The Versa LTE Advanced Pro module is available as an option when ordering appliances. For further details, please refer to the Versa CSG platforms ordering guide.

### About Versa Networks

Versa Networks the leader in SASE offers fully featured SD-WAN with integrated NGFW/UTP, ZTNA, advanced scalable routing, SD-LAN, genuine multi-tenancy, big-data based analytics and latest AI-ML technologies as part of its single stack software solution. Versa Networks is privately held and funded by Sequoia Capital, Mayfield, Artis Ventures, Verizon Ventures, Comcast Ventures, Liberty Global Ventures, and Blackrock Ventures.

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