

CDM-625 Advanced Satellite Modem Version 1.4.0

Comtech EF Data is pleased to announce the availability of version 1.4.0 for the CDM-625 Advanced Satellite Modem. This new release adds significant new features to the CDM-625 and enhances a number of existing features.



VersaFEC[™] Adaptive Modulation & Coding (ACM)

With the release of version 1.4.0, VersaFEC, the recently released next generation forward error correction, now supports a patent pending Adaptive Coding and Modulation (ACM) mode of operation. VersaFEC was specifically designed to provide maximum coding gain at the lowest possible latency for Constant Coding and Modulation (CCM) and ACM modes of operation. Since VersaFEC uses a constant number of symbols per frame (as opposed to DVB-S2, which uses a constant number of bits per frame), VersaFEC ACM provides a significant reduction in system latency compared to DVB-S2 ACM.

VersaFEC supports 12 different Modulation and Code sets (ModCods), ranging from BPSK 0.488 to 16-QAM 0.853.

The CDM-625 Advanced Satellite Modem supports VersaFEC with a plug-in module and appropriate software options for CCM Data Rate or ACM Symbol Rate.

Available data rate tiers for CCM operation are:

- 18 kbps 1.1 Mbps (included with plug-in module)
- 18 kbps 2.5 Mbps (FAST)
- 18 kbps 5 Mbps (FAST)
- 18 kbps 16 Mbps (FAST)

Available symbol rate tiers for ACM operation are:

- 37 ksps 300 ksps
- 37 ksps 1.2 Msps
- 37 ksps 4.1 Msps

ACM can only be used with the Ethernet interface.

Fractional License for DoubleTalk® Carrier-in-Carrier®

In addition to the unrestricted full license, the CDM-625 now supports a fractional license for DoubleTalk® Carrier-in-Carrier®. A fractional license allows Carrier-in-Carrier usage for up to 90 days per operational year.

Available fractional license tiers are:

- 2.5 Mbps (FAST)
- 5 Mbps (FAST)
- 10 Mbps (FAST)
- 15 Mbps (FAST)
- 20 Mbps (FAST)
- 25 Mbps (FAST)

A modem can have a full or fractional license, but not both. A fractional license can be upgraded to a full license in the future.

25% Transmit Filter Rolloff

The CDM-625 now supports 25% Rolloff in addition to 35%.

This is a standard feature.

Ethernet Interface Enhancements

A number of new features have been added to the Ethernet interface/switch.

VLAN

The CDM-625 now supports VLAN. Access/Native and Trunk mode are supported.

Ethernet Quality of Service (QoS)

The CDM-625 now supports priority based QoS for Ethernet traffic. The following modes are supported:

| Port Priority Only | Traffic prioritization is applied based on LAN ingress traffic port. |
|--------------------|---|
| VLAN Priority Only | Traffic prioritization is applied based on the priority bits in the LAN ingress |
| | frames VLAN tag. |
| VLAN and Port | If the LAN ingress frame contains a VLAN tag the traffic prioritization is |
| Priority | based on the VLAN Priority, otherwise it is based on the LAN ingress port |
| | priority. |

MAC Learning

MAC learning can now be enabled or disabled as needed.

Ethernet Port Configuration

Each Ethernet port can be configured for Auto Negotiation, 100 Mbps Full Duplex, 100 Mbps Half Duplex, 10 Mbps Full Duplex or 10 Mbps Half Duplex allowing users maximum flexibility.

Throughput Improvement

CDM-625 now provides increased throughput when using small packets and the link is congested.

Quad E1 Drop & Insert (QDI) Interface Enhancement

The QDI is designed to be used with E1s that have the same clock source. There have been a number of instances when the customers erroneously believed the E1s to have same clock source which caused link degradation.

With the new firmware, the pattern slips will be more graceful if using QDI with dissimilar clocks on each port.

Even with this enhancement, QDI is ONLY intended for use with E1s that have the same clock source.

To learn more about the CDM-625 Advanced Satellite Modem, please refer to the datasheet and user documentation available on our web site, www.comtechefdata.com. To place your order, please contact your Comtech EF Data sales associate.



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