

CDM625 /CDM625A OPTIONS							
OPTION No.	SERIAL NUMBER	151867623		152662006		122559145	
	POWER SUPPLY	100-240VAC		48VDC		48VDC	
	MODEL /VERSION	CDM625A V.1.4.1		CDM625A V.1.4.1		CDM625 V.2.0.3	
	MODE NORMAI /DEMO	NORMAL MODE	DEMO MODE	NORMAL MODE	DEMO MODE	NORMAL MODE	DEMO MODE
	Remaining Time in Demo Mode (seg)		2588961		255370		Demo expired
	Remaining Time in Demo Mode (horas)		719		71		
1	DATA RATE	Base 5Mbps installed	25 Mbps installed	Base 5Mbps installed	25 Mbps installed	Base 5Mbps installed	
2	TCP / LDPC	Base 5 Mbps TCP / LDPC installed	25 Mbps TCP / LDPC installed	Base 5 Mbps TCP / LDPC installed	25 Mbps TCP / LDPC installed	Base 5 Mbps TCP / LDPC installed	
3	CnC	2.5 Mbps CnC installed	25 Mbps CnC installed	2.5 Mbps CnC installed	25 Mbps CnC installed	2.5 Mbps CnC installed	
4	VERSAFEC-CCM	NOT INSTALLED	16 Mbps VersaFEC CCM installed	NOT INSTALLED	16 Mbps VersaFEC CCM installed	Base 1,1 Mbp VersaFEC installed	
5	VERSAFEC2-CCM	Base 5Mbps VERSAFEC2-CCM installed	25 Mbps VersaFEC-2 CCM installed	Base 5Mbps VERSAFEC2-CCM installed	25 Mbps VersaFEC-2 CCM installed	Reserved	
6	OPEN NETWORK FRAMING	NOT INSTALLED	Open Network Framing installed	NOT INSTALLED	Open Network Framing installed	NOT INSTALLED	
7	8-ARY	8-ARY installed	8-ARY installed	8-ARY installed	8-ARY installed	8-PSK, 8QAM installed	
8	16-ARY	16-ARY not installed	16-ARY installed	16-ARY not installed	16-ARY installed	16-QAM not installed	
9	D&I (1 PORT)	D&I (1 PORT) installed	D&I (1 PORT) installed	D&I (1 PORT) installed	D&I (1 PORT) installed	D&I (1 PORT) installed	
10	QUAD D&I (4 PORT)	NOT INSTALLED	QUAD D&I (4 PORT) installed	NOT INSTALLED	QUAD D&I (4 PORT) installed	NOT INSTALLED	
11	L-BAND	INSTALLED 950-2250 MHz	INSTALLED 950-2250 MHz	INSTALLED 950-2250 MHz	INSTALLED 950-2250 MHz	INSTALLED 950-2000 MHz	
12	IP-ACM (Adaptative Coding Modulation)	NOT INSTALLED	4100 kbps IP-ACM installed	NOT INSTALLED	4100 kbps IP-ACM installed	NOT INSTALLED	
13	G.703 CLOCK EXTENSION	NOT INSTALLED	G.703 Clock Extension installed	NOT INSTALLED	G.703 Clock Extension installed	NOT INSTALLED	
14	HEADER COMPRESSION	NOT INSTALLED	25 Mbps Header Compression installed	NOT INSTALLED	25 Mbps Header Compression installed	NOT INSTALLED	
15	PAYLOAD COMPRESSION	NOT INSTALLED	25 Mbps Payload Compression installed	NOT INSTALLED	25 Mbps Payload Compression installed	NOT INSTALLED	
16	ADVANCED QoS	NOT INSTALLED	Advanced QoS installed	NOT INSTALLED	Advanced QoS installed	NOT INSTALLED	
17	AES ENCRPTION	NOT INSTALLED	AES Encryption installed	NOT INSTALLED	AES Encryption installed	NOT INSTALLED	
18	FRACTIONNAL CnC	NOT INSTALLED	NOT INSTALLED	NOT INSTALLED	NOT INSTALLED	NOT INSTALLED	
19	ADVANCED NETWORK TIMING	Advanced Network Timing installed	Advanced Network Timing installed	NOT INSTALLED	Advanced Network Timing installed	NOT INSTALLED	
20	CARRIER ID	NOT INSTALLED	Carrier Id installed	NOT INSTALLED	Carrier Id installed		
21	CnC ACTIVATION	CnC Activation installed	CnC Activation installed	CnC Activation installed	CnC Activation installed		
22	32-ARY	NOT INSTALLED	32-ARY installed	NOT INSTALLED	32-ARY installed		
23	V2-ACM	NOT INSTALLED	12500 kbps V2-ACM installed	NOT INSTALLED	12500 kbps V2-ACM installed		

CDM625 /CDM625A OPTIONS							
OPTION No.	SERIAL NUMBER	151876314		122566484		122566491	
	POWER SUPPLY	100-240VAC		100-240VAC		100-240VAC	
	MODEL /VERSION	CDM625A V.1.4.1		CDM625 V.2.1.2		CDM625 V.2.1.2	
	MODE NORMAL /DEMO	NORMAL MODE	DEMO MODE	NORMAL MODE	DEMO MODE	NORMAL MODE	DEMO MODE
	Remaining Time in Demo Mode (seg)		2583288		Demo expired		65536
	Remaining Time in Demo Mode (horas)		718				18
1	DATA RATE	Base5Mbps installed	25 Mbps installed	Base 5Mbps installed		Base 5Mbps installed	25 Mbps installed
2	TCP / LDPC	Base 5 Mbps TCP / LDPC installed	25 Mbps TCP / LDPC installed	Base 5 Mbps TCP / LDPC installed		Base 5 Mbps TCP / LDPC installed	25 Mbps TCP / LDPC installed
3	CnC	2.5 Mbps CnC installed	25 Mbps CnC installed	2.5 Mbps CnC installed		2.5 Mbps CnC installed	25 Mbps CnC installed
4	VERSAFEC-CCM	NOT INSTALLED	16 Mbps VersaFEC CCM installed	Base 1,1 Mbp VersaFEC installed		Base 1,1 Mbp VersaFEC installed	16 Mbps VersaFEC CCM installed
5	VERSAFEC2-CCM	Base 5Mbps VERSAFEC2-CCM installed	25 Mbps VersaFEC-2 CCM installed	Reserved		Reserved	Reserved
6	OPEN NETWORK FRAMING	NOT INSTALLED	Open Network Framing installed	NOT INSTALLED		NOT INSTALLED	Open Network Framing installed
7	8-ARY	8-ARY installed	8-ARY installed	8-PSK, 8QAM installed		8-PSK, 8QAM installed	8-PSK, 8QAM installed
8	16-ARY	16-ARY not installed	16-ARY installed	16-QAM not installed		16-QAM not installed	16-QAM installed
9	D&I (1 PORT)	D&I (1 PORT) installed	D&I (1 PORT) installed	D&I (1 PORT) installed		D&I (1 PORT) installed	D&I (1 PORT) installed
10	QUAD D&I (4 PORT)	NOT INSTALLED	QUAD D&I (4 PORT) installed	NOT INSTALLED		NOT INSTALLED	QUAD D&I (4 PORT) installed
11	L-BAND	NOT INSTALLED	L-Bandoption installed but not HW (L-Band block missing)	NOT INSTALLED		NOT INSTALLED	L-Bandoption installed but not HW (L-Band block missing)
12	IP-ACM (Adaptative Coding Modulation)	NOT INSTALLED	4100 kbps IP-ACM installed	NOT INSTALLED		NOT INSTALLED	4100 kbps IP-ACM installed
13	G.703 CLOCK EXTENSION	NOT INSTALLED	G.703 Clock Extension installed	NOT INSTALLED		NOT INSTALLED	G.703 Clock Extension installed
14	HEADER COMPRESSION	NOT INSTALLED	25 Mbps Header Compression installed	NOT INSTALLED		NOT INSTALLED	25 Mbps Header Compression installed
15	PAYLOAD COMPRESSION	NOT INSTALLED	25 Mbps Payload Compression installed	NOT INSTALLED		NOT INSTALLED	25 Mbps Payload Compression installed
16	ADVANCED QoS	NOT INSTALLED	Advanced QoS installed	NOT INSTALLED		NOT INSTALLED	Advanced QoS installed
17	AES ENCRPTION	NOT INSTALLED	AES Encryption installed	NOT INSTALLED		NOT INSTALLED	AES Encryption installed
18	FRACTIONNAL CnC	NOT INSTALLED	NOT INSTALLED	NOT INSTALLED		NOT INSTALLED	NOT INSTALLED
19	ADVANCED NETWORK TIMING	Advanced Network Timing installed	Advanced Network Timing installed	NOT INSTALLED		Advanced Network Timing installed	Advanced Network Timing installed
20	CARRIER ID	NOT INSTALLED	Carrier Id installed				
21	CnC ACTIVATION	CnC Activation installed	CnC Activation installed				
22	32-ARY	NOT INSTALLED	32-ARY installed				
23	V2-ACM	NOT INSTALLED	12500 kbps V2-ACM installed				

6.2.8 SELECT: FAST Menu Branch



The display example as shown here depicts a unit shipped with the Two-channel Audio Drop hardware option installed. If this hardware is not included, 'Audio' does not appear on the bottom line.

```
FAST:  Options      Demo-Mode      CnC
Baseboard S/N 123456789  HW Rev1.X Audio
```

FAST (Fully Accessible System Topology) allows you to enable new options in the modem. Use the ◀▶ arrow keys to select **Options**, **Demo-Mode**, or **CnC**. Press **ENTER**.

6.2.8.1 FAST: Options

```
FAST options:  View Options
Set Register1  Set Register2      (◀ ▶ ⬆)
```

You can access the FAST options via three separate internal EEPROM registers. Each register requires its own FAST access code. Use the ◀▶ arrow keys to select **View Options**, **Set Register1**, or **Set Register2**. Press **ENTER**.

6.2.8.1.1 FAST: Options → View Options

```
FAST: View options: 01      (⬆)
Base 5 Mbps data rate installed
```

Use the ▲▼ arrow keys to scroll through the available options. The modem identifies each selected FAST option as "installed" or "not installed".

6.2.8.2 FAST: Demo-Mode

```
FAST Options Demo Mode: Off (Off,On) (⬆)
1209600 seconds remaining.
```

FAST Options Demo Mode allows access to **ALL** CDM-625A FAST options for 2592000 seconds (30 calendar days).

On the *top line*, use the ▲ ▼ arrow keys to select Demo Mode as **Off** or **On**. Press **ENTER**.

The *bottom line* displays the time remaining, in seconds.

Note that:

- The time count decrements only when Demo Mode is turned **On**. You may turn Demo Mode on and off an unlimited number of times until the full 30 calendar days expire.

Upon expiration of the Demo period, the following message displays:

```
FAST Options Demo Mode: Expired (⬆)
0000000 seconds remaining.
```

- Once the timer decrements to 0000000, you may no longer enable FAST Options Demo Mode. Your modem will still function with the purchased FAST enabled features.



If the Demo Mode timer reaches 0000000 while the modem is running a FAST feature that is not a purchased FAST feature, the modem will fall into an invalid state, turn off its carrier, and revert all settings to factory default settings.

6.2.8.3 FAST: CnC

```
FractionalCnC:1-YearCounter=00000000 sec  
                90-DayCounter= 0000000 sec
```

Fractional CnC is common in 1:1 or 1:N redundancy systems where the primary modem has a full CnC license, and the backup modem(s) has a Fractional CnC license. A Fractional CnC license allows 90 full calendar days of CnC usage in one calendar year. This lowers the cost of the modem but does not allow for constant, round-the-clock operation.

When you order Fractional CnC Mode, this screen displays the number of seconds remaining for both the 1-year (top line) and 90-day (bottom line) activation timers.

When the counters expire, you will see the following message:

```
Fractional CnC is not installed.
```

As per the previous screen examples, if you do not install Fractional CnC in the CDM-625A, the modem displays a message reflecting this state and provides “time remaining” and “time remaining refill” timers; when you install a Full CnC license, the screen displays **no** timers.

Note that:

- **1-YearCounter** – This is the calendar year counter, in seconds, that resets the 90-Day Counter to 90 full days of CnC usage when it reaches 00000000. This counter continually decrements and accounts for time even when you power **OFF** the modem. Once this timer fully decrements, the **1-YearCounter** resets to 31536000 once again and immediately begins to decrement.



The **1-Year Counter** cannot be reset or refilled in the field. Once the timer has run out, your only options are to:

- 1) Upgrade the modem to a full license.
- 2) Wait until “1-YearCounter” reaches 00000000.

Using Fractional CnC is not a normative mode of operation. To best inform you that your modem is running Fractional CnC (i.e., the “1-YearCounter” counter is actively decrementing), your modem does the following:

- The front panel RED Unit Status LED will blink on and off.
- The modem generates an Event in the Event Log every 12 hours that indicates Fractional CnC is running.
 - When connected to a 1:1 redundant switch, the modem generates a phantom fault every 12 hours, allowing the Full License CnC modem to return online if its fault has cleared.
- **90-DayCounter** – This is the amount of time, in seconds, that that the modem can be run in CnC mode. This counter decrements under the following conditions:
 - The modem has a Fractional CnC license;
 - The modem is powered on;
 - The modem’s TX is On;
 - The modem is in standalone mode or in 1:1 redundancy configuration and is Online;
 - The modem is NOT in Demo Mode. If the timer reaches 00:00:00:00, the modem will turn its TX Off and the circuit will be down.