



# DCM425

## Digital Cable Modem



RCA's latest DOCSIS 2.0 certified cable modem, the DCM425 incorporates the latest generation of silicon. The DCM425 supports up to 16 upstream flows and improved data throughput rates. It represents a significant improvement of our DOCSIS product-line in a small form factor. The 16 upstream flows allow operators to provide tiered data services and support more efficient traffic prioritization schemes for advanced services. The DCM425 allows symmetrical data transfer, and tripled upstream throughput. The modem also integrates Propane™ technology, enabling the connection of more Internet users without additional network bandwidth. RCA's case design is consistent throughout its product line of cable modems and gateways.

**RCA's other broadband cable products include:**

DCW725: DOCSIS 2.0 ready 4-port Wireless Gateway  
DHG525: 2 lines PacketCable DOCSIS VoIP E-MTA

- ▶ DOCSIS 1.0, 1.1, 2.0 certified.
- ▶ Bridging between the USB and Ethernet port.
- ▶ Easy access to advanced diagnostics web pages.
- ▶ USB port for easy installation.
- ▶ Reliable high-performance platform.
- ▶ Surf the Internet up to 100 times faster than a 56k analog Modem <sup>(1)</sup>

1 - Compared with a 56 kbps analog telephone modem.

Internet access sold separately.  
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### DOCSIS Based Design

The cable modem is certified to work on any DOCSIS based HFC cable system (DOCSIS1.0, DOCSIS1.1, or DOCSIS2.0).

### Bridging

Allows simultaneous connection of two PCs and enables Ethernet and USB port data traffic bridging.

### E-Z Start-Up Indicators

Easy-to-use LED lights on the front of the unit provide the user an intuitive mechanism for verifying the modem's operation and connectivity.

### Simple-to-Use Illustrated Setup Guide

The guide steps users through the connections of the broadband cable, electrical power, and Ethernet or USB cables.

### Security

Supports BPI+ communications privacy to support secure data exchange between modems and cable operators' servers.

### LED Administrative Disable indicator

Helps prevent unnecessary truck rolls.

### Internal Web Pages

The DCM425 contains multiple integrated Web pages allowing direct access to information about the status of the modem and product settings including privacy and security.

### Internet Security Button

Turning the modem off puts the modem into "standby" mode. The modem remains locked to the CMTS, responding to SNMP, enabling subscribers to resume activity quickly when toggled again. The button serves as a security feature, assuring the customer that the PC-network connection is de-activated when the button is in the off position, alleviating security concerns of an "always on" connection.

### Propane Technology

This advanced transport technology (Dynamic Payload Header Suppression) provides the subscriber with faster data transfers. It also allows operators to increase the number of subscribers on their network without affecting subscriber connection speeds. Under typical network conditions, both the subscribers and operators can benefit from more data bandwidth per customer, more voice channels for IP-telephony, and more users per fiber node.

### Technical Specifications

<b>► Standards</b>	
• DOCSIS 1.0, 1.1, 2.0 capable	DOCSIS 2.0 Certified
<b>► Receiver</b>	
• Downstream Modulation	64/256 QAM
• Center Frequency Range	91-857 MHz
• Channel Bandwidth	6 MHz
• Maximum Downstream Data Rate	27/38 Mbps {64QAM/256QAM}
• RF Input Sensitivity	+15 to -15 dBmV
• 64QAM:>23.5dB, 256QAM:>30dB	BER <1e-8
• Input Impedance	75 Ohm
<b>► Transmitter</b>	
• Frequency Range	5-42 MHz
• Upstream Modulator	8/16/32/64/128 QPSK or QAM
• Channel Bandwidth	200KHz, 400KHz, 800KHz, 1.6MHz, 3.2MHz, 6.4 MHz
• Maximum Upstream Data Rate	Max 5.12/10.24 Mbps {QPSK/16QAM}, 30Mbps with A-TDMA and S-CDMA
• RF Output Level	+8 to +55 dBmV (16QAM) ; +8 to +58 dBmV (QPSK) ;
• Automatic Level Adjust	Yes
• Gain Control Range	50dB
• Frequency Stability	± 5 kHz
• Output Impedance	75 Ohms
<b>► Silicon support for quality of service</b>	
• Number of upstream flows (SIDs) supported	16 (Enables support for advanced Quality of service support & tiered data services)
<b>► Software Features</b>	
• Software Downloadable	Yes
• Protocol Filtering	Ethernet & IP
• SNMP Management	V2, V3
• Security	BPI+
• Privacy	Through encryption between the gateway and the PC
• LED Diagnostics	5 LEDs used for status
• Local configuration through http Server	Hardware, Software status Basic settings Advanced settings Firewall
<b>► Physical</b>	
• Cabinet Dimensions	4.96"(W) x 4.21"D x 1.5"H (126mmx 107mm x 39mm)
• Packaging dimensions (inch)	11 3/4" (L) x 9 1/2" (D) x 3" (H)
• Overpack dimensions (inch)	20 1/4" (L) x 153/4" (D) x 161/4" (H)
• Approx. Shipping Weight	<3 lbs.
• Overpack shipping Weight appr.	29 lbs
• Overpack Quantity	10
• Operating Temperature	32°F to 104°F (0°C to +40°C)
• Cables	USB & Ethernet
• CD-ROM	Yes
<b>► I/O Interfaces</b>	
• Ethernet 10Base-T or 100Base-T	RJ45 – auto-detect
• RF Connector	F-Type
• Power (Wall Pack)	120Vac 60Hz
• USB Port, OS Supported - Windows	98SE, 2000, Me and XP
• User Switches	On/Off & Reset
<b>► PC Compatible</b>	
• CPU	486DX 66MHz (Pentium Preferred)
• System RAM	16MB (32MB Preferred)
• Operating System	Windows XP, Me, 2000
• Available Disk Space	76 MB
• Sound Card	16-Bit
• Video	VGA (SVGA Preferred)
• Ethernet	10 or 100 Base-T
• USB	Windows 98SE or later
• Drive	CD-ROM

### For more information

NCO-Corp  
704 Parker Rd  
Wylie, TX 75098  
(817) 277-3428  
www.nco-corp.com