

# TCM420

Digital Cable Modem



On January 27<sup>th</sup> 2010, Thomson changed its company name to Technicolor. All product data sheets, including those for products which still carry the Thomson name, now reflect our new Technicolor brand.

**CABLE**  
DATA

Technicolor's DOCSIS/Euro-DOCSIS2.0 cable modem, the TCM420 provides a competitive offer to cable operators with a compact and an easy-setup solution for consumers. This product benefits from an improved receiving performance by the use of a world class tuner.

Technicolor's robust case design is consistent throughout its product line of cable modems and gateways.

## Easy to Use, Easy to Install

As all Technicolor gateways, the TCM420 with Ethernet and USB port is an easy to use, easy to install gateway.

For convenience of the end user, the easy-to-access LEDs provide a clear indication of start-up sequence and connectivity status.

Multiple integrated Web pages allow direct access to the status and settings, including privacy and security information.

## Bridging

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

## Advanced Diagnostics

- Web pages to facilitate installation and troubleshooting
- Easy configuration and set-up
- Remote access via Telnet, SNMP, Web Page
- Post-installation easily managed with SNMP

## Features at a Glance

- EuroDOCSIS 2.0 certified
- Dual mode modem: DOCSIS/EuroDOCSIS 2.0
- Propane™ technology, enabling the connection of more Internet users without additional network bandwidth
- Ethernet and USB 1.1 ports for wired connectivity and easy installation
- Reliable high-performance platform
- IPv6 ready
- BPI+ communications privacy to support secure data
- exchange between modems & cable operator's servers



Cable Europe Labs

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## Digital Cable Modem

### Technical Specifications

#### Standards / Certifications

- Data EuroDOCSIS 2.0 certified
- CMTS Interoperability Any qualified Euro-DOCSIS and DOCSIS CMTS
- WHQL-certified USB driver yes

#### Receiver

- Downstream Modulation QAM 64/256
- Downstream Frequency Range 108-862 MHz
- Maximum Downstream Data Rate 41.71/55.61 Mbps
- Input Signal Level Range +43 to +73 dB $\mu$ V (QAM 64)  
+47 to +77 dB $\mu$ V (QAM 256)
- BER <1x10<sup>-8</sup> @ C/N>25,5dB, QAM 64 with FEC  
<1x10<sup>-8</sup> @ C/N>34,5dB, QAM 256 with FEC, received power = +47 to +54 dB $\mu$ V  
<1x10<sup>-8</sup> @ C/N>31,5dB, QAM 256 with FEC, received power = +54 to +77 dB $\mu$ V
- Input Impedance 75 Ohm

#### Transmitter

- Upstream Modulation QPSK and 16 QAM
- Additional Upstream Modulation Types QAM 8/32/64 for A-TDMA and QAM 128 for S-CDMA channels
- Upstream Frequency Range 5-65 MHz
- Maximum Upstream Data Range Max 5.12/10.24 Mbps {QPSK/QAM 16},  
Max 30.720 Mb/s (QAM 64)
- Output Signal Level Range A-TDMA:  
+68 to +115 dB $\mu$ V @ QPSK  
+68 to +118 dB $\mu$ V @ QAM 8/16  
+68 to +114 dB $\mu$ V @ QAM 32/64  
S-CDMA:  
+68 to +113 dB $\mu$ V /All
- Output Impedance 75 Ohm
- Channel Bandwidth Programmable (200\*N KHz) N=1, 2, 4, 8, 16, 32
- Automatic Level Adjust yes
- Gain Control Range 50dB
- Frequency Stability  $\pm$  5 kHz

#### PC Compatible

- CPU 486DX 66MHz (Pentium Preferred)
- Memory RAM 16MB (32MB Preferred)
- Operating Systems Windows 2000, XP and Vista
- Available Disk Space 76 MB
- Sound Card 16-Bit
- Video VGA (SVGA Preferred)
- Ethernet Port 10/100 Base-T
- USB port With Windows 98SE/ME/2000/XP/Vista
- Drive CD-ROM

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### Software Features

■ Software Downloadable	yes
■ Bridging	Between USB and Ethernet
■ Multiple Client Support	32
■ Class of Services (CoS)	16 SIDs
■ Protocol Filtering	Ethernet & IP
■ SNMP Management	V2, V3
■ Security	BPI+
■ Privacy	Through encryption between gateway and PC
■ HTTP Server (CM status)	yes

### Interfaces / Physical

■ Ethernet	1 x RJ45 10/100 Base-T auto detect
■ RF Connector	1 x F-Type
■ USB Port device	1x USB 1.1
■ Button	Reset
■ LEDs	Message, Cable Activity, Cable Link, PC Link, Internet
■ Power Supply	External, 230VAC 50Hz
■ Operating Temperature	0° to 40°C
■ Operating Humidity	20% to 90% non-condensing
■ Storage Temperature	-20° to 70°C
■ Safety	CE and CB

### Packaging Information

■ Cabinet Dimensions	mm: 126 (L) x 110 (D) x 42 (H)
■ Packaging Dimensions	mm: 255 (L) x 170 (D) x 85 (H)
■ Shipping Weight	Approx. 1,1 kg
■ Master-pack Dimensions	mm: 780 (L) x 350 (D) x 258 (H)
■ Master-pack Shipping Weight	Approx. 10 kg
■ Master-pack Quantity	18 units

### Content of the Box

- Cable Modem
- Power supply
- Ethernet Cable
- USB Cable
- CD-ROM
- Quick Installation Guide

Technicolor Professional Services are available to address your demands for qualified technical support & warranty, product maintenance, access to training courses and tailor-made solutions to specific product evolution. For more information, please ask your usual contact person.

TECHNICOLOR WORLDWIDE HEADQUARTERS  
1, rue Jeanne d'Arc  
92443 Issy-les-Moulineaux France  
Tel. : 33(0)1 41 86 50 00 - Fax : 33 (0) 1 41 86 58 59

[www.technicolor.com](http://www.technicolor.com)

#### SALES CONTACT

For more information please get in touch with your usual sales representative or use the following email:

[cablesales@technicolor.com](mailto:cablesales@technicolor.com)



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