

THOMSON

THG520 VoIP Cable Modem



Thomson is expanding further its Broadband Cable Modem Product range by introducing an E-MTA, the THG520. This Voice Cable Modem is an indoor MTA (Media Terminal Adapter) solution. The THG520 product builds on Thomson's successful Cable Modem Product and is based on Euro-DOCSIS™ 2.0 Hardware specification, and the Euro-standard. Moreover, the THG520, Euro-DOCSIS™ 2.0 ready, will benefit from improved RF performances thanks to a world-class tuner. Enhanced with the now Thomson standard Dual-Mode feature, the THG520 is a versatile product which can cope with both DOCSIS™ and Euro-DOCSIS™ standards.

Other Broadband Cable Products:

TCM410: Euro-DOCSIS 2.0 certified hardware (new enclosure)
TCM420: Euro-DOCSIS 2.0 ready hardware, 1.1 certified
TCM425: DOCSIS 2.0 certified hardware
TCW690: One port Euro-DOCSIS/DOCSIS 2.0 802.11g Wireless Cable Modem
TCW710: One port Euro-DOCSIS/DOCSIS 2.0 802.11g Wireless Cable Modem

- ▶ Euro-DOCSIS™ 2.0 ready hardware
- ▶ Euro-PacketCable™
- ▶ Dual-Mode cable modem (DOCSIS™ and Euro-DOCSIS™)
- ▶ USB port for easy installation.
- ▶ Reliable high-performance platform.
- ▶ Surf the Internet Up to 100 Times Faster than a 56k analog Modem ⁽¹⁾
- ▶ Sip support (EuroPacketcable optional configuration)

1 - Compared with a 56 kbps analog telephone modem.
Internet access sold separately.
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Euro-DOCSIS™ 2.0 Based Design

The cable modem is prepared to work on any Euro-DOCSIS based HFC cable system. Resident 2.0 hardware enables future upgrades to advanced Euro-DOCSIS™ 2.0 features.

E-Z Start-Up Indicators

Easy-to-use LED lights on the front of the unit show the modem status. This provides the user the ability to verify modem operation and connectivity.

Dual-Mode cable modem -

The cable modem is able to work with both Euro-DOCSIS™ and DOCSIS™ standards (if using the Euro-DOCSIS™ bandwidth).

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 operator's servers.

Propane® technology -

This advanced transport technology (Dynamic Payload Header Suppression) allows operators to increase the number of subscribers on their network without investing unnecessarily in bandwidth capacity. In the appropriate conditions, operators can benefit from more data bandwidth per customer, more voice channels for IP-telephony, and more users per fiber node.

Technical Specifications

► Standards

• Euro-DOCSIS 2.0	Field Upgradeable to 2.0 (include 1.1)
• CMTS Interoperability	Any qualified Euro-DOCSIS and DOCSIS* (*) using the Euro-DOCSIS frequency bandwidth with a DOCSIS CMTS
• Operating Systems supported	Any with Ethernet connection, Windows 98SE, 2000, Me and XP with USB

► Receiver

• Downstream Modulation	64/256 QAM
• Downstream Frequency Range	108-862 MHz
• Maximum Downstream Data Rate	41.71/55.61 Mbps (64QAM/256QAM)
• RF Input Sensitivity	+43 to +73 dBμV(64QAM), +47 to +77 dBμV(256QAM)
• BER <10 ⁻⁸	64QAM:C/N>25.5dB, 256QAM: for +47dBμV to +54 dBμV C/N >34.5dB, +54 dBμV to +77 dBμV, C/N > 31.5dB
• Input Impedance	75 Ohm

► Transmitter

• Frequency Range	5-65 MHz
• Upstream Modulator	QPSK/16QAM
• Additional Upstream Modulation types for DOCSIS 2.0	8QAM,32QAM,64QAM for S-CDMA and TDMA channels
• Channel Bandwidth	200KHz, 400KHz, 800KHz, 1.6MHz, 3.2MHz, 6.4MHz (**)
• Maximum Upstream Data Rate (QPSK/16QAM),	Max 5.12/10.24 Mbps
• RF Output Level	Max 30.720Mb/s(64QAM) (**) +68 to +115 dBμV (8QAM & 16QAM); +68 to +118 dBμV (QPSK); +68 to +114 dBμV (32QAM & 64QAM)(**) +68 to +113 dBμV (S-CDMA all modulation types) (**) Yes 50dB ± 5 kHz 75 Ohms
• Automatic Level Adjust	
• Gain Control Range	
• Frequency Stability	
• Output Impedance	

► Telephony Features

• Caller ID support	Type I & Type II
• Basic and Extended Residential Class Features	Yes
• Hearing impaired modem support (V.18)	Yes
• Call Control protocol	SIP
• Codecs	G.711, G728 and G729E
• Multi Lines Phone Support	Yes
• Fax Support	Yes (from August 2004)
• Power Supply with Long Term protection	Yes

► Software Features

• Software Downloadable	Yes
• Bridging	Between USB and Ethernet
• Multiple client support	250
• Class-of-Service (COS)	16 SID's
• Protocol Filtering	Ethernet & IP
• SNMP Management	V2, V3
• Security	BPI+
• IP Security	Hardware support
• LED Diagnostics	8-step LED
• Privacy	Through encryption between the gateway and the PC
• Local configuration through http Server	Hardware, Software status
	Basic settings

► Packaging & Content

• Cabinet Dimensions (cm)	180mm (L) x 140mm (D) x 50mm (H)
• Shipping Weight appr.	1,2 kg
• Packaging dimensions (cm)	310mm (L) x 180mm (D) x 95mm (H)
• Overpack dimensions (cm)	385mm (L) x 398mm (D) x 395mm (H)
• Overpack shipping Weight appr.	15 kgs
• Overpack Quantity	10
• Operating Temp.	0°C to +40°C
• Cables	USB & Ethernet
• CD-ROM	Yes

► I/O Interfaces

• Ethernet 10Base-T or 100Base-T	One RJ45 – auto-detect
• RF Connector	F-Type
• Power (Wall Pack)	230Vac 50Hz
• Telephony Lines RJ11	2
• USB Port	Yes
• Number of PCs Supported	254

► I/O Interfaces

• CPU	486DX 66MHz (Pentium Preferred)
• System RAM	16MB (32MB Preferred)
• Operating System	Windows XP, Me, 2000
• Sound card	16 bit
• Available Disk Space	76 MB
• Video	VGA (SVGA Preferred)
• Ethernet	10 or 100 Base-T
• USB	Windows 98SE or later
• Drive	CD-ROM

► VoIP Protocols Supported

• Amount of codecs	Selection of three
• Supported codecs	PCM A-law, PCM m-law, G.723.1, G.729, G.729a, G.729e, G.728, BV16 and BV32

(**) Euro-DOCSIS™ 2.0 specific Propane® is a trademark of Broadcom Corporation and or its subsidiaries in the United States and certain other countries.

For more information

Thomson
46, quai Alphonse Le Gallo
92100 Boulogne-Billancourt
France
Tel. : 33 (0) 1 41 86 50 00
Fax : 33 (0) 1 41 86 56 59
www.thomson.net