

With the evolution of cable standards, DOCSIS/EuroDOCSIS 3.0 will prove decisive for cable operators wishing to provide high bandwidth data delivery and to stay ahead of the content with game and video over IP delivery. With this new generation of High Speed Data Services Solution, Thomson introduces up to eight (8) bonded downstream channels and four (4) bonded upstream channels, with a design backward-compatible for use as a single-channel with older networks without any service interruption. Thanks to the integrated dual split tuner solution, the operator will benefit from flexibility in channel allocation: to ease the management when the channel frequency plan is loaded or to separate data from other services such as video over IP.

The TCM470 comes in a sleek attractive new case design which becomes Thomson's now «family look» going forward.

Key Characteristics

- offering high bandwidth with advance multimedia services, new IPTV alternatives.
- Euro-DOCSIS 3.0.
- Dual-Mode cable modem: DOCSIS and Euro-DOCSIS.
- 64MHz dual tuner fully compliant with DOCSIS 3.0 Split tuner with two 32MHz capture windows.
- A powerful processor and architecture.
- MPEG2 over IP Encapsulation solution allowing the support of IPTV with existing QAM (digital video) broadcast infrastructure. Thanks to the eight (8) channel solution, it is possible to allocate 4 channels for data and 4 channels for dedicated IPTV.
- Power control features with ability to turn off any or all modules, to slow down or turn off processors and to turn off all external interfaces.

- Advanced power management with Silicon integration providing better control of power consumption thanks to the integrated tuner, a better control of power consumption with Integrated upstream power amp, and the ability to turn off external GigE interfaces thanks to the integrated GigE.
- Giga Ethernet port for wired connectivity and easy installation.
- Easy-to-access LEDs provide a clear indication of start-up sequence and connectivity status.
- Multiple integrated Web pages allowing direct access to the status and settings, including privacy and security information.
- Reliable high-performance platform.
- Supports IPv4 and IPv6.
- BPI+ communications privacy to support secure data exchange between modems and cable operators' servers.



Technical specifications

Standards/Certifications

Data Euro-DOCSIS 3.0 full compliant

CMTS Interoperability Any qualified Euro-DOCSIS and DOCSIS (*) CMTS

Receiver

Downstream Modulation QAM 64/256

Downstream Frequency Range 1

Maximum Downstream Data Rate Capture windows

108~1000MHz

440 Mbps (Theoretical) (55.61Mbps x 8 channels)
64 MHz capture window split into two windows of 32

MHz thanks to the integrated dual tuner solution.

Number of downstreams up to 8

Input Signal Level Range -15dBmV ~ + 15dBmV (TBC)

Input Impedance 75 Ohms

|Transmitter

Upstream Modulation QPSK and 8, 16, 32, 64 and 128 QAM

Number of upstreams 4

Upstream Frequency Range 5-65 MHz

Maximum Upstream Data Rate 131 Mbps (Theoretical) (32.78Mpbs x 4 channels)

Output Impedance 75 Ohms

Channel Bandwidth 200kHz, 400kHz, 800kHz, 1.6MHz, 3.2MHz and 6.4MHz

PC Compatible

Operating Systems Windows XP, 2000, Vista
Ethernet port 10/100/1000 BT
Drive CD-ROM

| Software Features

Software Downloadable Yes Multiple Client Support 16 SID's Class-Of-Services (COS) Protocol Filtering Ethernet & IP SNMP Management V2, V3 Security BPI+ HTTP Server (CM status) Yes Local configuration yes Through HTTP server yes

| Interfaces & Physical

Giga Ethernet 1 x RJ45 - 10/100/1000 Base-T auto-detect

RF Connector 1x F-Type

Buttons 1: reset

LEDs 5: Power, DS, US, Online, Link
Power supply External, 230VAC 50Hz

Operating Temperature 0°C to 40°C

Operating Humidity 20% to 90 % non condensing

 $\begin{array}{ll} \mbox{Storage Temperature} & -20\mbox{°C to }70\mbox{°C} \\ \mbox{Safety} & \mbox{CE and CB} \\ \end{array}$

| Packaging & Content

Cable Ethernet

CD-ROM Yes

Quick Installation Guide Yes, English language

Professional services

Thomson Professional Services are available to address Cable TV operators' demand for highly qualified technical support & warranty, continuous product maintenance, access to training courses and tailor-made solutions to specific evolution. For more information, please ask your point of contact.

(*) Using the Euro-DOCSIS frequency bandwidth with a DOCSIS CMTS

