THOMSON

TCW750-4 4-Ethernet-Port Wireless Cable Gateway

Data Voice Video

Thomson DOCSIS/Euro-DOCSIS[™] 2.0 TCW750-4 features 802.11b/g wireless connection with an excellent broadcast range thanks to the use of an external antenna. With the addition of advanced firewall, router, four (4) Ethernet connections and optional local configuration settings, this gateway is the ideal and simple networking solution for the residential and SOHO environments and benefits from improved RF performances thanks to a world-class tuner. Ready for fixed mobile convergence, the TCW750-4 includes the latest protection for wireless protocols: WPA (WiFi Protected Access) and WEP (Wired Equivalent Privacy).

The TCW750-4 comes in a sleek attractive new case design which becomes Thomson's now «family look» going forward.

Key Characteristics

- Euro-DOCSIS 2.0 compliant.
- Dual-Mode cable modem: DOCSIS and Euro-DOCSIS.
- Propane[™] technology, enabling the connection of more Internet users without additional network bandwidth.
- 802.11b/g wireless connection supporting 254 PCs maximum at speed up to 54Mb/s.
- 4x Ethernet ports 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.
- IPv6 ready.

Security

CABLE

- Security through a built-in stateful packet inspection firewall providing protection against Internet hackers and Denial of Service attacks.
- BPI+ communications privacy to support secure data exchange between modems and cable operators' servers.
- WPA, WPA2 and WEP support: data encryption between the gateway and the wireless connected computer.
- Wireless access control mechanism to prevent unauthorized wireless users.
- VPN's with IPSec.

Ready for fixed mobile convergence solution

- Traffic prioritization with Wi-Fi Multimedia (WMM) based on the IEEE 802.11e.
- Multiple SSID mode management with possibility to create up to 4 virtual standalone Access Points. Default configuration with 2 secured access points.
- VLAN management.



CABLE

SATE

TERRESTR

Technical specifications

Euro-DOCSIS 2.0 compliant

+43 to +73 dBµV (QAM 64)

+47 to +77 dBµV (QAM 256)

received power = +47 to +54 dBµV

received power = +54 to +77 dBµV

QAM 64/256

108-862 MHz

75 Ohms

5-65 MHz

A-TDMA

S-CDMA: +68 to +113 dBµV /All

75 Ohms

6.4MHz

+ 5 kHz

Yes 50dB

QPSK, QAM 16

S-CDMA channels

Any gualified Euro-DOCSIS and DOCSIS (*) CMTS

41,71/55,61 Mbps (QAM 64 / QAM 256)

<1x10-8 @ C/N>25,5dB, QAM 64 with FEC

<1x10-8 @ C/N>34,5dB, QAM 256 with FEC,

<1x10-8 @ C/N>31,5dB, QAM 256 with FEC,

QAM 8/32/64 for A-TDMA and QAM 128 for

Programmable (200*N KHz) N=1, 2, 4, 8, 16, 32

200KHz, 400KHz, 800KHz, 1.6MHz, 3.2MHz,

Max 5.12/10.24 Mbps {QPSK/QAM 16},

Max 30.720 Mb/s (QAM 64)

+68 to +118 dBµV @ QPSK

+68 to +115 dBµV @ QAM 8/16 +68 to +114 dBµV @ QAM 32/64

Standards/Certifications

Data CMTS Interoperability

Receiver

Downstream Modulation Downstream Frequency Range Maximum Downstream Data Rate Input Signal Level Range

BER

2

Input Impedance

Transmitter

Upstream Modulation Additional Upstream Modulation Types

Upstream Frequency Range Maximum Upstream Data Rate

Output Signal Level Range

Output Impedance Channel Bandwidth

Automatic Level Adjust Gain Control Range Frequency Stability

Wireless Features

 Protocol
 Fully 802.11b/g Compatible

 Antenna
 One external antenna

 Throughput
 Up to 54 Mbps Data Rate

 Wireless security
 64/128 bit WEP Encryption, WPA, WPA2, Support Temporal Key Integrity Protocol (TKIP), IEEE 802.1x Port-Based Authentication with RADIUS client

WPS

Gateway Features

Network Protocol	IP, TCP, UDP, ARP, ICMP, DHCP, FTP, TFTP, SNMP, HTTP
Firewall	IP Filtering, Stateful Packet Inspection (SPI), Intrusion Detection for Denial of Service (DoS) attacks, Flexible Parental Control, URL Content Filtering
Firewall control	Web-Based User Interface Management and Administration, Remote User Access, Logging & Alert

Yes

PC Compatible

Operating Systems	With Windows 2000/XP/Vista
Ethernet port	10 or 100 Base-T
Drive	CD-ROM

Software Features

Software Downloadable Yes Multiple Client Support 254 Class-Of-Services {COS} 16 SID's Protocol Filtering Ethernet & IP SNMP Management V2, V3 Security BPI+ HTTP Server (CM status) Yes Local configuration Yes

Interfaces & Physical

802.11 b/g connection at up to 54Mb/s Wireless Ethernet 10Base-T or 100Base-T 4x RJ45 - auto-detect **RF** Connector 1x F-Type Buttons 1:reset LEDs 9 : Eth1-4, WLAN, Power, DS, US, Online External 230VAC 50Hz Power supply **Operating Temperature** $0^{\circ}C$ to $40^{\circ}C$ Operating Humidity 20% to 90% non condensing Storage Temperature -20°C to 70°C Safety CE

Packaging & Content

Cabinet Dimensions	mm: 210 (L) x 160 (D) x 40 (H)
Packaging Dimensions	mm: 263 (L) x 197 (D) x 98 (H)
Shipping Weight	Approx. 1,4 kg
Master-pack Dimensions	mm: 515 (L) x 540 (D) x 220 (H)
Master-pack Shipping Weight	Approx. 16,5 kg
Master-pack Quantity	12 units
Cable	Ethernet
CD-ROM	Yes
Quick Installation Guide	Yes, English language

Professional services

Thomson Professional Services are available to address cable 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.



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-broadband.com