

## TCW710 Wireless Cable Gateway



CABLE

SATELLITE

TELECOM

TERRESTRIAL

Data / Voice / Video

The Thomson DOCSIS/Euro-DOCSIS™ 2.0 TCW710 features 802.11b/g wireless connection with an excellent broadcast range thanks to the use of an external antenna. With the addition of CableHome™ 1.1, advanced firewall, router, one Ethernet connection 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. The TCW710 includes the latest protection for wireless protocol, WPA (WiFi Protected Access) and WEP (Wired Equivalent Privacy).

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

### | Key Characteristics

- Euro-DOCSIS 2.0 certified.
- 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 at speeds up to 54Mb/s.
- Ethernet and USB 1.1 ports for wired connectivity and easy installation.
- Privacy through WEP protocols (encryption between the gateway and the PC).
- 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.

### | Bridging

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

### | High Speed Wireless Interface

The TCW710 supports the 802.11b/g standard at speeds up to 54Mb/s and integrates an internal 32-bit data bus guarantees superior handling of data traffic.

### | Security

- 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.

# TCW710

## Wireless Cable Gateway

### Technical specifications

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#### Standards/Certifications

Euro-DOCSIS 2.0 certification	Yes
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 (QAM 64 / QAM 256)
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 Ohms

#### Transmitter

Upstream Modulation	QPSK, QAM 16
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 Rate	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 Ohms
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

#### 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

#### 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

#### PC Compatible

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

#### Interfaces & Physical

Wireless	802.11 b/g connection at up to 54Mb/s
Ethernet 10Base-T or 100Base-T	1x RJ45 – auto-detect
RF Connector	1x F-Type
USB Port device	1x USB 1.1
Buttons	2: Internet On/Off, reset
LEDs	5: WLAN, Ethernet, USB, Cable Link, Internet
Power supply	External, 230VAC 50Hz
Operating Temperature	0°C to 40°C
Operating Humidity	20% to 90% non condensing
Storage Temperature	-20°C to 70°C
Safety	CE

#### Packaging & Content

Cabinet Dimensions	mm: 170 (L) x 130 (D) x 42 (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. 15 kg
Master-pack Quantity	12 units
Cable	Ethernet
CD-ROM	Yes
Quick Installation Guide	Yes

#### 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

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