technicolor

MediaAccess TG589vn v3

Wireless n Ultra Broadband Gateway







Innovation at its Best

The accelerating growth of WAN and LAN traffic is pushing operators to look for higher-speed network technologies to solve the bandwidth crunch.

To answer to the need for increased bandwidth Technicolor has created the TG589vn v3, a future-proof ultra broadband service gateway allowing best-in-class VDSL2 connectivity.

In addition to its four Fast Ethernet LAN ports, the TG589vn v3 also offers an IEEE 802.11b/g/n wireless access point for Local Area Network (LAN) access.

The Ultimate in Ultra Broadband

The accelerating growth of WAN and LAN traffic is pushing operators to look to ultra-high-speed network technologies to solve the bandwidth crunch. VDSL2 combined with Gigabit Ethernet enables extremely high bandwidth and guarantees superior quality in voice, data and video. Adding on top some of the latest performance-enhancing technologies gets the utmost out of existing infrastructures:

- Gvector: effectively cancels the crosstalk noise inherently present in VDSL2 bands. With vectoring, every line in a binder can operate at peak performance, as if there were no other VDSL2 lines in that binder.
- G.INP ("Impulse Noise Protection"): makes sure that no errors occur on the DSL connection, even under extreme conditions, so that high-quality video transmission is guaranteed at all times. It is based on the principle of retransmission.

Features at a Glance

- Integrated VDSL2 modem
- 4 FE ports to connect multiple devices, such as PCs, laptops, set-top boxes...
- Wireless networking on-board: 802.11b/g/n (2.4 GHz)
- Wi-Fi Protected Setup (WPS[™])
- Media sharing: UPnP A/V[™] and DLNA®
- 1 USB 2.0 master port for hard disk, printer, 3G adapter ...
- Remotely manageable: TR-069, TR-098, TR-111
- Built-in stateful firewall, parental control
- Innovative easy-customizable design
- Future-proof hardware and software
- IPv6 enabled



Wireless n Ultra Broadband Gateway

Easy Management

The TG589vn v3 offers best-in-class TR-069 interoperability with main ACS vendors and even completes the standard with proprietary vendor extensions to increase the range of functionalities available.

TR-111 support allows simple management of LAN devices like TR-135 enabled set-top boxes connected to the gateway.

Easy Installation

Like all Technicolor gateways, the TG589vn v3 interoperates seamlessly with the Technicolor Gateway Setup wizard, making the setup of a wireless home network as easy as clicking a button. No more helpdesk calls are needed, just click and you are ready to go. The Technicolor Gateway Setup wizard performs comprehensive system checks before and during the installation and setup process, and validates all user input to guarantee the end user a secured wireless connection to the Internet.

Furthermore, thanks to the Flexiport feature, the TG589vn v3 automatically detects the Ethernet port where a set-top box is connected. This simplifies the installation process of Internet Protocol Television (IPTV) for end users.

Media Sharing

The TG589vn v3 acts as a central hub for distribution of all content from any device to any device in the home. You can stream music, data, pictures and video from your gateway to devices connected to your wired or wireless home network.

Highest Security

The Technicolor firewall guarantees users the ultimate network security level. Through integration with NAT, the firewall leverages all the Application Level Gateways (ALGs) provided in the NAT context to minimize undesired service impacts. The firewall provides Stateful Packet Inspection (SPI), and an integrated Intrusion Detection and Prevention System (IDS) engine monitors a wide range of attack patterns, and logs potential security breaches to a local cache or remote server.

The TG589vn v3 also supports powerful wireless security mechanisms, such as Wi-Fi Protected Access (WPA2) together with a secure and user-friendly connection and configuration mechanism for wireless clients (WPS).

The support of multiple SSIDs in the gateway enables support for up to four independent wireless access networks. These additional wireless networks allow other wireless users to enjoy the high-performance access without compromising the integrity of the basic network, thus keeping the original network access limited and secure.

Future-Proof Design

As a high-end service memory platform, the TG589vn v3 is futureproof thanks to its scalable software architecture. The most advanced features can be integrated without any problem; even third-party applications, such as home monitoring, helpdesk..., are easily integrated.

The robust housing design itself is top of the class and makes customization very easy: for example operators can add their own brands and colours.

IPv6 Enabled

With the approaching IPv4 address pool depletion, our products need to be ready for IPv6. Technicolor is a frontrunner in the introduction of IPv6 on its devices, with the TG589vn v3 being enabled for multiple IPv6 field scenarios. Internet Protocol version 6 is the next generation of Internet technologies aiming to effectively support the ever-expanding Internet usage and functionality, and also to address security concerns that exist in an IPv4 environment.

Technicolor aims to introduce IPv6 as smoothly as possible in customer networks. By providing in-depth knowledge of the networking stack, we guide our customers in their transition from IPv4 to IPv6.

ECO

Technicolor offers its customers environmentally friendly products. In addition to carefully selected plastics and packaging to minimize the ecological footprint, the TG589vn v3 benefits from a unique combination of hardware and software features that reduce power consumption substantially.

Professional Services

To reinforce our extensive portfolio of digital home solutions, Technicolor has a dedicated Professional Services team to make sure that every deployment is a success, from initial provisioning and integration to operations, upgrades, ongoing support and beyond.

Our wide array of services spans the entire customer project lifecycle, encompassing:

- Expert consulting
- Seamless system integration
- Warranty on all our products
- Qualified technical support and maintenance
- Efficient repair, refurbishment and recycling

MediaAccess TG589vn v3

Wireless n Ultra Broadband Gateway

Technical Specifications

Hardware Specifications

Interfaces WAN	RJ-11 DSL line port
Interfaces LAN	4-port autosensing 10/100Base-T auto-MDI/
	MDI-X Ethernet LAN switch
	1 USB 2.0 master port
	Wi-Fi IEEE 802.11b/g/n on-board
Extras	WPS button
	ECO button
	Reset button
	Power button
Dimensions	195 x 60 x 230 mm (9 x 2.4 x 9.7 in.)
AC Voltage	100-240 VAC (switched mode power supply)
Temperature	0° - 40° C (32° - 104° F)
Humidity	20 % to 80 %

DSL Modem Specifications

Supports multi mode standards		
ADSL compliance	ANSI T1.413 Issue 2,	
	ITU-T G.992.1 Annex A, B (G.dmt),	
	ITU-T G.992.2 Annex A, B (G.lite),	
	ITU-T G.994.1 (G.hs)	
	Maximum rate: 8 Mbps for downstream	
	and 1 Mbps for upstream	
ADSL2 compliance	ITU-T G.992.3 Annex A, B, L, M	
	(G.dmt.bis),	
	ITU-T G.992.4 Annex A, B, L, M	
	(G.lite.bis)	
	Maximum rate: 12 Mbps for downstream	
	and 1.5 Mbps for upstream	
ADSL2+ compliance	ITU-T G.992.5 Annex A, B	
	Maximum rate: 24 Mbps for downstream	
	and 3 Mbps upstream	
VDSL2 compliance	ITU G.993.2	
	SOS	
	SRA	
	INM	
	Up to 17 MHz profiles (POTS/ISDN)	
	ITU-T G.993.5 (G.vector)	
	ITU-T G.998.4 (G.inp)	

Management

- Customizable user-friendly GUI via HTTP and HTTPS
- Unified management interface (MBus)
- Web services API for remote access (portal, management, diagnostics, applications,...)
- GUI-embedded Easy Setup wizard
- On-demand remote GUI assistance (helpdesk)
- Web-browsing intercept (install / diagnostics)
- PC (wireless) Technicolor Gateway Setup wizard
- TR-069 CPE WAN Management Protocol

TR-098 Internet Gateway Device management TR-111 home network device management

- TR-064 LAN side configuration
- Zero-touch autoprovisioning

Services

- Printer sharing
- Content sharing

Samba file server $UPnP\:A/V^{{}^{\scriptscriptstyle M}}$ media server and control point Certified DLNA® Digital Media Server HDD file systems: FAT32, NTFS, EXT2, EXT3, HFS+ (optional) Metadata support Remote HDD file access

- 3G USB adapter support
- Dynamic DNS
- URL- and content-based website filtering (optional)
- Open architecture for 3rd party application and UI development

Wireless Performance and Security

- Wi-Fi IEEE 802.11b/g/n access point Wi-Fi CERTIFIED[®]
- WPA(2)[™]-Personal, WEP[™]
- Wi-Fi Multimedia (WMM[®])
- Wi-Fi Protected Setup (WPS[™])
- Up to 4 BSSIDs (virtual AP) support
- Security and service segregation per SSID
- Dynamic rates switching for optimal wireless rates
- RX/TX switched diversity
- Manual/auto radio channel selection

Security

- Stateful Packet Inspection Firewall (SPIF)
- Customizable firewall security levels
- Intrusion detection and prevention (DoS, SYN Flood, Ping of Death, Fraggle, LAND, Teardrop...)
- DeMilitarized Zone (DMZ)
- Multi-level access policy
- "SIM-lock" provider locking

Networking

- Symmetrical NAT with application helpers (ALGs)
- Game and application sharing NAT port maps
- DHCP conditional serving & relay, DNS server & relay
- IGMPv3 proxy
- IGMP snooping
- DHCP spoofing
- Flexiport (automatic selection of Ethernet port bridged IPTV)
- IEEE 802.1q VLAN bridging, multiple bridge instances

MediaAccess TG589vn v3

Wireless n Ultra Broadband Gateway

Technical Specifications

IPv6 Networking

IPv4 / IPv6 dual IP stack		
Supported models	PPP(oE)(oA) – IPoE(oA)	
Transitioning:	6rd/6to4/6in4	
	DSLite	
Stateful connection tracking / stateful inspection firewall		
DHCPv6	Stateful/stateless DHCPv6 client	
	Stateless DHCPV6 server	
	Relay	
	Prefix Delegation	
DNS v4/v6 Proxy		
ULA		
ICMPv6		

Wireless n Ultra Broadband Gateway DSL cable (RJ-11)

Content of the Box

- Ethernet cable (RJ-45)
- Power supply unit
- Setup CD and leaflet
- Filter or splitter (optional)

- IPv6 Quality of Service
- MLDv1/v2

Quality of Service (QoS)

ATM QoS	UBR, VBR-nrt, VBR-rt, CBR shaping, queuing and
	scheduling
	CLP tagging
IP QoS	Flexible classification (ALG aided)
	IP rate limiting (two-rate remarking/dropping)
	DSCP (re) marking
	TCP ACK optimization
	Dynamic link fragmentation
	Per service class connection/resource reservation
Ethernet QoS	Priority or C-VLAN/S-VLAN tagging
	Switch port queuing and scheduling
Wireless QoS	WMM (BE, BK, VI, VO access categories)
	queuing and scheduling

Technicolor TG589vn v3 back panel

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

SALES CONTACT

For more information please get in touch with your usual sales representative or use the following email: EMEASalescontact@technicolor.com NAMSalescontact@technicolor.com LATAMSalescontact@technicolor.com



© Copyright 2012 Technicolor. All rights reserved. Photos and specifications are subject to change without notice. All trade names referenced are service marks, trademarks, or registered trademarks of their respective companies. DMS-DAT-20120529-0001 v2.0 DS-224-v02-1210