# technicolor

## TG788vn

Wireless n VoIP Ultra Broadband Gateway





#### **TELECOM**

DATA

**VOICE** 

**VIDEO** 

### Innovation at its Best

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

The TG788vn is a unique future-proof triple-play service gateway allowing VDSL2 connectivity while providing Voice over IP (VoIP) functions for residential users.

Next to its four Fast Ethernet LAN ports, the TG788vn also offers an IEEE 802.11b/g/n wireless access point for Local Area Network (LAN) access.

### Voice over IP

The TG788vn offers phone POTS ports to accommodate phones and faxes. Once the gateway is registered with a VoIP service, regular phone calls can be conducted over the Internet with all the benefits of IP telephony. The gateway offers a wide range of services such as caller ID, CLIP, CLIR, call waiting, call forwarding, 3-way conferencing and message waiting notification.

## Easily Manageable

The TG788vn 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. TR-104 for VoIP is implemented for the configuration and management of all voice services.

#### Features at a Glance

- Integrated VDSL2 modem
- 4 Fast Ethernet (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)
- 2 FXS ports
- Media sharing: UPnP A/V and DLNA
- 1 USB 2.0 master for hard disk, printer, 3G adapter ...
- Remotely manageable: TR-069, TR-098, TR-104, TR-111
- Built-in stateful firewall, parental control
- Innovative easy-customizable design
- Future proof hardware and software
- IPv6 ready
- ECO COCv4 compliant







## Wireless n VoIP Ultra Broadband Gateway

### **Easy Installation**

Like all Technicolor gateways, the TG788vn 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 inputs to guarantee the end-user a secured wireless connection to the Internet.

Furthermore, thanks to the Flexiport feature, the TG788vn 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.

#### **ECO**

Technicolor offers its customers ECO labeled products covering objectives that go beyond those stated in the regulations that all marketed products have to meet. Next to carefully selected plastics and packaging to minimize the ecological footprint, the TG788vn benefits from a unique combination of hardware and software features that reduce power consumption substantially. For instance, a button allows the user to disable/enable the wireless access point when this function is not required.

## **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 TG788vn 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**

Thanks to its service memory platform, the TG788vn can go a long way, not only in its hardware, but also on the software side. The most advanced features can be integrated without any problem; even third-party applications, such as home monitoring, helpdesk..., are easily integrated.

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

## Media Sharing

The TG788vn acts as 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.

### **Professional Services**

Technicolor offers a wide array of services:

- Hardware: Optimize warranty and hardware operations such as repair, logistics, dedicated inventories, recycling, refurbishing, ...
- Support & Maintenance contracts providing a technical support line, software support, updates, upgrades, on-site support, training.
   Dedicated response time can be tailored to fit your organization with BRONZE, SILVER and GOLD agreements.
- Develop specific software functions, features and GUI's to create and deploy innovative subscriber services in your market.
- Technicolor proposes Integration Services on technologies, products, third party software to accelerate your project whilst optimizing your time to market. We can also provide resources for project management, engineering, planning, and assist your team with device interoperability tests, Proof Of Concept (POC) and trials
- Missions to optimize your Total Cost of Ownership (TCO) by analyzing your hotline calls and proposing relevant actions to reduce your OPEX budgets.
- Leveraging its many years of expertise in creating gateway and set-top box products - with over 200 million devices delivered to diverse markets all around the world - Technicolor has built an experienced and dedicated design team able to propose a great variety of new, innovative design services, ranging from unique product aesthetics to product content.

## TG788vn

## Wireless n VoIP Ultra Broadband Gateway

## **Technical Specifications**

Hardware Specifications

Interfaces WAN RJ-11 DSL line port

4-port autosensing 10/100Base-T auto-MDI/ MDI-X Ethernet LAN switch ■ Interfaces LAN

2 FXS POTS ports 1 USB 2.0 host/master

Wi-Fi IEEE 802.11b/g/n on board

WPS button ■ Extras

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)

0° - 40° C (32° - 104° F) ■ Temperature

Humidity 20 % to 80 %

### DSL Modem Specifications

Supports multi mode standard

■ 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

ITU-T G.992.3 Annex A, B, L, M ■ ADSL2 compliance

(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

ITU-T G.992.5 Annex A, B ■ ADSL2+ compliance

Maximum rate: 24 Mbps for downstream and

■ VDSL2 compliance Up to 17 MHz profiles (POTS/ISDN)

#### Management

- Customizable user friendly GUI via HTTP and HTTPS
- Unified management interface (MBus)
- WAN port auto-sensing: Automatic selection and configuration of WAN interface
- Web services API for remote access (portal, management, diagnostics, applications,...)
- GUI-embedded Easy Setup wizard
- On demand Remote GUI assistence (helpdesk)
- Web-browsing Intercept (install / diagnostics)
- PC (wireless) Technicolor Gateway Setup Wizard

■ TR-069 CPE WAN TR-098 internet gateway device

management protocol management

TR-104 voice service provisioning and

configuration

TR-111 home network device management

TR-140 storage service provisioning

- TR-064 LAN side configuration
- Zero-touch auto-provisioning

#### Services

Printer sharing

Content sharing Samba file server

 $UPnP \ A/V^{\tiny{\text{TM}}} \ media \ server \ and \ control \ point$ 

(optional)

Certified DLNA® DMS

HDD file systems: FAT32, NTFS (optional)

Metadata support Remote HDD file access

- 3G USB adapter support
- Dynamic DNS
- Website URL and content-based 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)<sup>™</sup>-Personal, WEP<sup>™</sup>
- 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...)
- DMZ
- Multi-level access policy
- "SIM-Lock" provider locking

### Networking

- Symmetrical NAT with application helpers (ALGs)
- Game and application sharing NAT portmaps
- 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
- IPv6 ready

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## **Technical Specifications**

### Voice over IP Features

■ Voice Functionality Signalling: SIP, MGCP (optional), H.323

(optional)

Codecs: G.711, G.726, G.729, wideband

(G.722), T.38

Echo cancellation: G.168 compliant Comfort Noise Generator (CNG)

Flexible telephone number per FXS, including

common numbers

Interopable with main market softswitches

Supplementary Call waiting (on call basis) and Advanced Services

Caller ID

Call forwarding (no answer/busy/

unconditional) Call transferring Call hold, call return

Calling Line Identification Presentation (CLIP) Calling Line Identification Restriction (CLIR) Calling Name Identification Presentation

Calling Name Identification Restriction (CNIR)

Fax transparency 3-way conference

Message Waiting Indicator (MWI)

Missed call e-mail Click to dial Warm line

Call completion to busy subscriber

Forced FXO

Abbreviated number

Common number in/outgoing call

Anonymous call rejection Distinctive ringing Voice mail on no reply

Support for secondary outbound proxy DNS NAPTR, DNS SRV

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

#### Content of the Box

■ Wireless-n VoIP Multi-Service Ethernet WAN VDSL2 Gateway

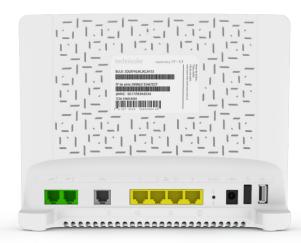
■ DSL cable (RJ-11)

■ Ethernet cable (RJ-45)

■ Power supply unit

Setup CD and leaflet

■ Filter or splitter (optional)



Technicolor TG788vn back panel

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