Technicolor’s DWA1230 is a unique future-proof dual-play service gateway allowing VDSL Bonding and through its flexible SFP cage also gigabit speed GPON FTTH or G.fast connectivity. Thanks to its integrated wireless video bridge featuring a robust chipset and 4x4 antennas, the DWA1230 can support seamless real-time HD video streaming over next generation 802.11ac Wi-Fi without any interruption of your data traffic.

The Perfect Fit for Flexible WAN Connection Deployments
The DWA1230 is a carrier grade smart service gateway featuring bonded VDSL WAN connectivity and a Gigabit Ethernet WAN port. It also offers a Small Form-factor Pluggable (SFP) interface, providing a flexible solution to connect the DWA1230 to GPON Fiber-To-The-Home (FTTH) networks, or to enable the new G.fast standard to bring gigabit access speeds on copper technology.

It can be supplied with a Technicolor SFP module adapted to your specific GPON or G.fast requirements, or alternatively Technicolor can work with your approved SFP vendor to deliver a complete gateway solution.

Flexible & Future-Proof Software Stack
The DWA1230 is enriched with Technicolor Homeware, a reliable and managed middleware that offers an open architecture with multiple application environments fit to open up the connected home and deliver an unlimited spectrum of value-added services and applications.

Featuring a platform agnostic architecture, Technicolor Homeware is a fully portable solution that ensures the fastest time to market. Moreover, its modularity and enhanced life cycle management make it easy to add or remove components to or from a software release, while enabling second & third party development.

Leveraging open source, Technicolor Homeware embraces different execution environments and supports current and emerging trends, transforming the gateway into a full-blown app platform.

Features at a Glance

- Integrated VDSL2 modem, supporting
  - Bonded ADSL2+
  - VDSL2 (up to 35b profile)
  - Bonded VDSL2 (up to 17a profile)
- Technicolor’s first DSL modem featuring Reference Noise Cancellation (RNC)
- 1 GE WAN port
- 1 SFP WAN port for
  - GPON fiber FTTH deployments
  - Gigabit speed G.fast deployments
- AutoWAN sensing™
- 4 GE LAN ports
- Dual-band concurrent Wi-Fi interfaces:
  - IEEE 802.11n 2.4 GHz (3x3) with high power
  - IEEE 802.11ac 5 GHz (4x4)
- Enabled to support Wi-Fi Doctor® (sold separately) and Wi-Fi Conductor (sold separately)
- Bonded MoCA 2.0
- 1 USB 3.1 Gen 1 port
- Seamless media sharing (UPnP A/V™ and DLNA®)
- Future-proof full service platform
- Extensive remote management
- Non-service-affecting platform software upgrades (dual bank memory)
- IPv4 & IPv6 enabled
- Designed according to the latest ECO standards
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.

In this bandwidth-hungry era of IPTV, real-time HD video streaming - to name but a few - operators need to stay competitive and keep costs down, among others by taking advantage of existing facilities as much as possible.

Our DWA1230 innovation helps you get the most out of your network by letting you re-use existing copper wiring and giving higher coverage from one DSLAM.

Some of the latest performance-enhancing technologies have been added on top, to get the utmost out of existing infrastructures:

- **Bonding**: works by combining multiple wire pairs to increase available capacity, or extend the copper network’s reach. It typically combines two regular VDSL2 lines into a single, virtual “big pipe”.
- **G.vector**: 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.
- **Profile 35b**: allows for aggregate speeds of up to 350 Mbps over traditional copper telephone lines deployed from the cabinet, thus filling the gap between VDSL2 17a vectoring and G.fast.
- **G.fast (optional)**: uses Time Division Multiplexing for wider frequency profiles on the twisted copper pair. This enables gigabit speeds over short distances (up to 200m).
- **Reference Noise Cancellation (RNC)**: allows to filter out received noise on the DSL line at the gateway side directly to optimize the quality of the received signal and deliver higher performing broadband to the subscriber.

Seamless Video over Next-Gen Wi-Fi

With its support of dual band concurrent Wi-Fi (IEEE 802.11n 2.4 GHz and the next-generation IEEE 802.11ac wireless standard for the 5 GHz band), the DWA1230 is a powerful and future-proof smart gateway enabling high-speed wireless HD video streaming inside the home. Thanks to its integrated wireless video bridge featuring a robust chipset and 4x4 antennas, it can support multiple HD TV channels over the clean 5 GHz radio. Furthermore, its advanced architecture guarantees a very low packet error rate on the wireless link.

Simultaneously, it guarantees uninterrupted transmission of data services over IEEE 802.11n using the 2.4 GHz band.

Furthermore, the latest wireless technologies ensure robust in-home wireless distribution which reduces wiring complexity and provides true mobility without sacrificing Quality of Service (QoS) and Quality of Experience (QoE) or transfer speeds.

Easy to Use

Like all Technicolor modems and gateways, the DWA1230 is an easy to use, easy to install device.

For convenience of the end user, the easy-to-access LEDs provide a clear indication of start-up sequence, operational status, and connectivity status.

Multiple integrated web pages also allow direct access to the status and settings, including privacy and security information.

Superspeed USB

The DWA1230 comes with one superspeed USB 3.1 Gen 1 master port to support mass storage devices, LTE and 4G USB adapters, enabling transfer speeds multiple times higher than the conventional USB 2.0.

Media Sharing

The DWA1230 acts as a fully compliant DLNA 1.5 Digital Media Server (DMS) and enables 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.

In addition, the DWA1230 supports hot plugging of USB hard disk drives, allowing you to simply plug and play devices without the need to switch the gateway off first.

Easy to Manage

The DWA1230 is completely designed according to the TR-069's TR-098 IGD data model through which the device can be configured remotely by the operator without interrupting the end user’s experience.

In addition, the TR-1812 Device:2 data model is made available to further increase the remote management capabilities towards life cycle management, diagnostics and application management.
## Technical Specifications

### Hardware

- **Interfaces WAN**
  - 2 RJ-11 DSL line ports
  - 1 Small Form-factor Pluggable (SFP) port
  - 1 autosensing 10/100/1000 Base-T Ethernet WAN port
  - 4-port autosensing 10/100/1000 Base-T Ethernet LAN switch

- **Interfaces LAN**
  - IEEE 802.11n 2.4 GHz
  - IEEE 802.11ac 5 GHz
  - 1 Type RF connector, external threaded for MoCA
  - 1 USB 3.1 Gen 1 master port

- **Buttons & indicators**
  - 4 status LEDs
  - WPS button (with integrated LED)
  - Reset button (recessed)
  - Power button

- **Power input**
  - DC jack

- **Power supply**
  - 12 VDC external PSU

- **AC voltage**
  - 100 - 240 VAC (switched mode power supply)

- **Operating temperature**
  - 0 - 40 °C (32 - 104 °F)

- **Operating humidity**
  - 20 - 95 % RH non-condensing

- **Storage temperature**
  - -20 - 70 °C (-4 - 158 °F)

- **DSL Modem**
  - Supports multi mode standards
  - Supports Reference Noise Cancellation (RNC) technology
  - ADSL compliance:
    - ITU-T G.992.1 Annex A (G.dmt)
    - ITU-T G.992.2 Annex A (G.dsis)
  - Rates up to 8 Mbps downstream and 1 Mbps upstream
  - ADSL2 compliance:
    - ITU-T G.992.3 Annex A, L (G.dmt.bis)
    - ITU-T G.992.4 Annex A, L (G.dsis.bis)
    - ITU-T G.994.4 (G.lan)
  - Rates up to 16 Mbps downstream and 1 Mbps upstream
  - ADSL2+ compliance:
    - ITU-T G.992.5 Annex A, M
    - ITU-T G.997.4 (G.lan)
    - ITU-T G.998.1 ATM Bonding
    - ITU-T G.998.2 Ethernet Bonding
  - Rates up to 24 Mbps downstream and 3 Mbps upstream (per DSL line)
  - VDSL2 compliance:
    - ITU-T G.993.2
    - SOS
    - SRA
    - INM
  - Up to 17a MHz profiles (on bonded interface)
  - ITU-T G.993.5 (G.vector)
  - ITU-T G.994.4 (G.lan)
  - ITU-T G.995 ATM Bonding
  - ITU-T G.998.2 Ethernet Bonding

- **SFP**
  - Compatibility:
    - compliant GPON ONT SFP modules
    - compliant G.fast SFP modules

- **MoCA**
  - Bonded MoCA 2.0, full backwards compatible with MoCA 1.1
  - Support for up to 16 MoCA network nodes
  - MAC throughput:
    - Bonded MoCA 2.0: Up to 400 Mbps
    - Bonded MoCA 2.0: Up to 800 Mbps
  - Physical rate: 200 Mbps per 100 MHz channel
  - Supports both parameterized and prioritized QoS

### Wi-Fi

- **Full dual band concurrent Wi-Fi access points,**
  - Wi-Fi certified®
  - 2.4 GHz (3x3) IEEE 802.11n AP
  - 5 GHz (4x4) IEEE 802.11ac AP
  - with IEEE 802.11ac compliant transmit beamforming

- 2.4 GHz Wi-Fi power
  - Up to 35 dBm (1162 mW EIRP)

- 5 GHz Wi-Fi power
  - Up to 35 dBm (1995 mW EIRP)

- Wi-Fi Protected Setup (WPS™)

- Wi-Fi security levels
  - WPA2™-Enterprise / WPA™-Enterprise
  - WPA2™-Personal / WPA™-Personal

- Wi-Fi Multimedia (WMM®) and WMM-Power Save

- Support for up to 4 BSSIDx (virtual AP) per radio interface

- Wi-Fi guest hotspots capabilities

- 3x 3 MIMO 2.4 GHz Wi-Fi features
  - SGi
  - STBC
  - Cyclic Delay Diversity (CDD)
  - Frame bursting

- 4x4 MU-MIMO 5 GHz Wi-Fi features
  - SGi
  - STBC
  - Explicit beam forming
  - LDPC (FEC)
  - Multi-User MIMO

- Dynamic rate switching for optimal wireless performance

- Manual/auto radio channel selection

### Management

- Customizable user-friendly GUI via HTTP and HTTPS
- Web services API for remote access (portal, management, diagnostics, applications, ...)
- Web-browsing intercept (install/diagnostics/captive portal)
- Command Line Interface (CLI)
  - SSH v2
- TR-069 CPE WAN Management Protocol (CWMP)
  - TR-099 Internet Gateway Device (IGD) management
  - TR-111 home network device management
  - TR-140 storage service provisioning
  - TR-143 network throughput performance tests and statistical monitoring
  - TR-157a Life Cycle Management (LCM)
  - TR-181i Device:2 data model
- TR-098 Internet Gateway Device (IGD) management
- TR-069 CPE WAN Management Protocol (CWMP)
- Zero-touch autoprovisioning

### Services

- Life Cycle Management (LCM) for developing advanced services support
- Open architecture for 3rd party application and UI development
- 3G/LTE/4G mobile fall-back WAN connection (through USB adapter)
- AutoWAN sensing™ (automatic selection and configuration of WAN interfaces)
- Capable to support Wi-Fi Doctor® (sold separately) and Wi-Fi Conductor (sold separately)
- Supportable Wi-Fi guest hotspots (optional, on request)
- Supportable Wi-Fi guest hotspots (optional, on request)
- Parental control
  - URL- and (optional) content-based website filtering
  - Time-based access control
- Printer sharing
  - IPP, LDP
- Content sharing
  - Server Message Block (SMB), Samba file server
  - UPnP A/V® media server and control point
  - DLNA® DMS
  - Metadata support
- HDD file systems
  - FAT32, NTFS, ExFAT
  - EXT2, EXT3, EXT4, HFS+
DWA1230
Wireless .11ac
Smart Ultra-Broadband Gateway
with Integrated Video Bridge and MoCA

Technical Specifications

Networking
- Symmetrical NAT with application helpers (ALGs)
- Game and application sharing NAT port maps
- DHCP conditional serving & relay
- DNS server & relay
- IGMPv4 proxy (Fastleave)
- IGMP snooping (full routed)
- DHCP spoofing
- IEEE 802.1q VLAN bridging, multiple bridge instances
- Multicast to unicast translation on Wi-Fi interfaces

IPv6 networking
- IPv4 / IPv6 dual IP stack
- Supported models: PPPoE(oA), IPv6(oA)
- Transitioning: 6rd/6to4/6in4, DS-Lite
- Stateful connection tracking / stateful inspection firewall
- DHCPv6: Stateful/stateless DHCPv6 client, Stateless DHCPv6 server, Relay
- Prefix Delegation
- ICMPv6

Quality of Service
- ATM QoS: UBR, VBR-crt, VBR-nrt, CBR shaping, queueing and scheduling
- CLP tagging
- IP QoS: Flexible classification (ALG aided)
- IP rate limiting (two-rate remarking/dropping)
- DSCP (e) marking
- Dynamic link fragmentation
- Ethernet QoS: Priority or C-VLAN/S-VLAN tagging
- Switch port queueing and scheduling
- Wireless QoS: WMM (BE, BK, VI, VO access categories) queueing and scheduling

Security
- Stateful Packet Inspection Firewall (SPF)
- Customizable firewall security levels
- Intrusion detection and prevention
- DeMitizalized Zone (DMZ)
- Multilevel access policy
- Security and service segregation per SSID

ECO design
- ECO mode for more intelligent power saving
- Wi-Fi on/off button
- WMM-Power Save

Package contents
- DWA1230
- DSL cable(s)
- Ethernet cable
- Power supply unit
- Quick Setup leaflet(s) (optional)
- Safety Instructions & Regulatory Information booklet
- Filter(s) or splitter(s) (optional)

Provided by: Mega Hertz  800-883-8839  info@go2mhz.com  www.go2mhz.com