



24 x 8

technicolor

FEEL THE WONDER

DPC3848VE

Smart Wireless .11ac
Gigabit-Class Cable Gateway

CABLE

DATA

VIDEO

■ Latest Gigabit-Class Bandwidth Technology

The DPC3848VE is a DOCSIS 3.0 cable gateway introducing the next generation in ultrahigh-speed data services. This new cable solution offers next to up to 8 bonded upstream channels, 24 bonded downstream channels for wired gigabit download speeds of up to 1.02 Gbps. Operators can now offer their customers even faster broadband access as well as demanding IPTV services.

The dedicated applications processor and software execution environment turns the DPC3848VE into powerful and reliable platform in the home, ready for demanding services and applications.

The DPC3848VE has an extended life cycle thanks to its extensive remote management capabilities, including the ability to smoothly upgrade itself and add apps on the go.

■ Next-Gen Wireless Technology for Next-Gen Speeds

Featuring the next-generation IEEE 802.11ac wireless standard for the 5 GHz band, this dual band Wi-Fi solution makes optimal use of the wireless spectrum. With its optimized antenna configuration, the DPC3848VE enables even higher throughput and better coverage over the much less crowded 5 GHz radio.

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

Features at a Glance

- DOCSIS® 3.0 compliant
- Backward compatible with DOCSIS® 2.0 (and older)
- 24 bonded downstream and up to 8 bonded upstream channels
- Full band capture tuner
- Built-in RF spectrum analyzer
- 4 GE LAN ports
- Wireless networking on-board
 - IEEE 802.11n 2.4 GHz (3x3)
 - IEEE 802.11ac 5 GHz (3x3)
- 1 highspeed USB 2.0 master port
- Seamless media sharing (UPnP™ AV)
- MPEG2 over IP encapsulation solution
- Future-proof full service platform
- Advanced security features
- TR-069 remote management
- IPv4 & IPv6 enabled
- Designed to meet the latest ECO standards



DPC3848VE

Smart Wireless .11ac
Gigabit-Class Cable Gateway

■ Full Band Capture Solution

Thanks to its fully integrated 1 GHz wideband tuner, the DPC3848VE exceeds SCTE-40+ performance and eliminates all frequency limitations of traditional wideband tuners. The DPC3848VE enables use of the full Radio Frequency (RF) spectrum without the need for grouped channels. This helps the operator migrate his entire DOCSIS 3.0 installed base from one to 24 DOCSIS downstream channels without having to realign all broadband channels to accommodate this new service.

Remote diagnostics provides real time, unobtrusive diagnostic and spectrum analysis capabilities, without effecting user service on any of the 24 downstream channels.

■ Video Streaming

The DPC3848VE contains an MPEG2 to IP encapsulation solution allowing the capture of the DVB-C free-to-air video signal on the RF network and the distribution of this video signal over IP on the local network of the customer.

This feature is available upon software upgrade of the DPC3848VE and is a first step for cable operator towards distributing IPTV without any change to their existing QAM (digital video) broadcast infrastructure.

■ Advanced Security

The integrated firewall provides Stateful Packet Inspection (SPI), and an integrated Intrusion Detection and Prevention System (IDS) engine which monitors a wide range of attack patterns, and logs potential security breaches to a local cache or remote server.

To secure data exchange between the gateway and the cable operators' servers, BPI+ communications privacy is used.

The DPC3848VE supports up to eight wireless networks (mSSID), enabling to set up independent virtual wireless access points. These additional wireless networks allow other wireless users to enjoy high-performance access without compromise on the integrity of the basic network, thus keeping the original network access limited and secure.

■ Easy to Use

Like all Technicolor modems and gateways, the DPC3848VE 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.

■ ECO

Technicolor is committed to offer its customers sustainable products and implements a set of ECO features to reach the best possible environmental performance. In addition to carefully selected plastics and packaging to minimize the ecological footprint, the DPC3848VE benefits from a unique combination of hardware and software features that reduce power consumption substantially.

DPC3848VE

Smart Wireless .11ac Gigabit-Class Cable Gateway

Technical Specifications

Hardware

■ Interfaces WAN	1 F-type connector, external threaded
■ Interfaces LAN	4-port autosensing 10/100/1000 Base-T Ethernet LAN switch 1 USB 2.0 master port IEEE 802.11n 2.4 GHz on-board IEEE 802.11ac 5 GHz on-board
■ Buttons	WPS button Reset button 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 - 90 % RH non-condensing
■ Storage temperature	-20° - 70° C (-4° - 158° F)

Certifications

■ Data	DOCSIS® 3.0 compliant
■ CMTS interoperability	Any qualified DOCSIS® CMTS

Receiver

■ Downstream modulation	64, 256 QAM
■ Downstream frequency range	108 - 1002 MHz
■ Number of downstream channels	Up to 24
■ Maximum downstream data range	1029 Mbps (theoretical 42.88 Mbps x 24 channels)
■ Capture windows	Full Band Capture (possibility to have any of the 24 downstream channels over the full DOCSIS spectrum)
■ Input signal level range	-15 dBmV / + 15 dBmV
■ Input impedance	75 Ohm

Transmitter

■ Upstream modulation	QPSK 8, 16, 32, 64 and 128 QAM
■ Upstream frequency range	5 - 42 MHz 5 - 85 MHz (optional)
■ Number of upstream channels	4 (5 - 42 MHz upstream split) 8 (optional, 5 - 85 MHz upstream split)
■ Maximum upstream data range	122.9 Mbps (theoretical 30.72 Mbps x 4 channels) 245.8 Mbps (optional, theoretical 30.72 Mbps x 8 channels)
■ Channel bandwidth	200, 400 and 800 kHz, 1.6, 3.2 and 6.4 MHz
■ Output impedance	75 Ohm
■ Upstream Spectral Analysis	

Wireless

■ Full dual band concurrent Wi-Fi access points, Wi-Fi certified®	2.4 GHz (3x3) IEEE 802.11n AP 5 GHz (3x3) IEEE 802.11ac AP with IEEE 802.11ac compliant transmit beamforming
■ Wi-Fi output power	Up to 26 dBm (400 mW EIRP) for 2.4 GHz Up to 24 dBm (250 mW EIRP) for 5 GHz
■ 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	
■ Up to 8 BSSIDs (virtual AP) support per radio interface	
■ Wireless hotspot capabilities	
■ 3x3 MIMO 2.4 GHz Wi-Fi features	SGi STBC 20/40 MHz coexistence
■ 3x3 MIMO 5 GHz Wi-Fi features	SGi STBC 20/40/80 MHz mode
■ RX/TX switched diversity	
■ Dynamic rate switching for optimal wireless performance	
■ Manual/auto radio channel selection	

Management

■ User-friendly GUI via HTTP	
■ Web-based user interface management and administration	
■ Logging and alert	
■ TR-069 CPE WAN Management Protocol (CWMP)	
■ SNMP management	SNMP v2, SNMP v3
■ HNAP server 1.2+	

Services

■ Wireless hotspot	Static DHCP IP Scope over tunnel
■ Parental control	URL- and (optional) content-based website filtering Time-based access control MAC address-based access control
■ Content sharing	Server Message Block (SMB) Samba file server UPnP A/V™ media server
■ HDD file systems	FAT32, NTFS EXT2, EXT3, EXT4 HFS+

Smart Wireless .11ac Gigabit-Class Cable Gateway

Networking

- | | |
|----------------------|--|
| ■ Network protocol | IP (IPv4, IPv6 DS-Lite)
TCP, UDP
ARP, ICMP, DHCP
TFTP, SNMP, HTTP |
| ■ Protocol filtering | Ethernet and IP |

- Stateful Packet Inspection Firewall (SPIF)
- Customizable firewall security levels
- Intrusion detection and prevention (DoS, SYN Flood, Ping of Death)
- Security and service segregation per SSID

■ Downloadable software	
■ Multiple client support	254
■ Class of Services	32 downstream IDs 32 upstream service flows BPI+
■ Security	
■ HTTP server	

■ Power control features	Ability to turn off any or all modules Slow down or turn off processors Turn on or turn off external interfaces Dynamic power consumption reduction
--------------------------	--

- DPC3848VE
- Ethernet cable (RJ-45)
- Power supply unit
- Quick Setup leaflet (optional)
- Safety Instructions & Regulatory Notices booklet



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
- Software customizations and customer change orders
- Qualified technical support and maintenance
- Seamless system integration
- Efficient repair, refurbishment and recycling
- Warranty extensions on all our products

technicolor
FEEL THE WONDER