TECHNICOLOR CGA4233

DOCSIS 3.1 SMART ULTRA-BROADBAND CABLE GATEWAY MIT VOICE PORTS FÜR GIGABIT SPEEDS

Der CGA4233 ist ein DOCSIS 3.1-fähiger Kabel-Gateway mit Gigabit-Geschwindigkeit und VoIP-Funktionen für den Heim- und Business-Markt. Dank seiner integrierten WLAN Video-Bridge mit 4x4 Antennen bietet der CGA4233 unterbrechungsfreies Real-Time HD-Videostreaming über IEEE 802.11ac WLAN der nächsten Generation ohne ihre normale Datenübertragung zu unterbrechen.

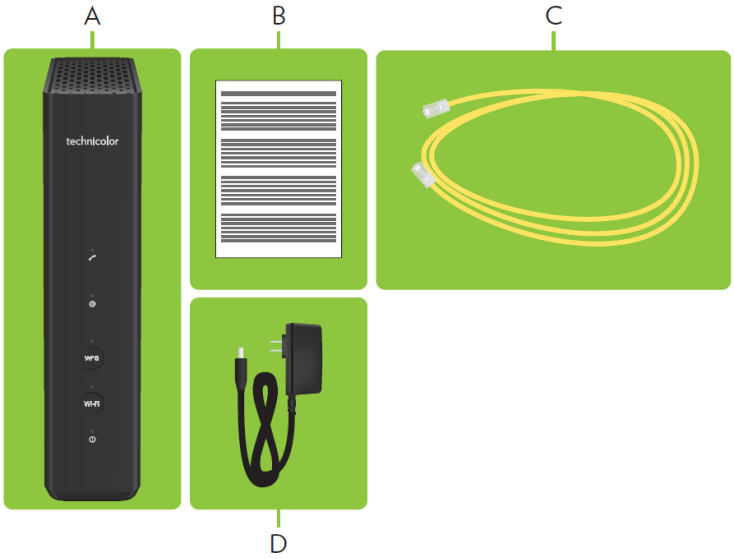
- DOCSIS 3.1 konform
- 2 x 2 OFDM(A) Bonded Channels im DOCSIS 3.1 Modus
- 32 x 8 Bonded Channels im DOCSIS/EuroDOCSIS 3.0 Modus
- Bis zu 1.2 GHz Full Band Capture Tuner
- 4x GE LAN-Ports
- WLAN on board:
  - IEEE 802.11n 2.4 GHz (3x3)
  - IEEE 802.11ac Wave 2 5 GHz (4x4)
- 2x FXS Ports für Telefon und Fax
- 1x Superspeed USB 3.1 Gen 1 Master Port
- Abwärts kompatibel mit DOCSIS/EuroDOCSIS 3.0
- Automatisch schaltbarer Diplexer für Up- und Downstream
- Eingebauter HF-Spektrum-Analyzer
- PacketCable 2.0, (Euro)PacketCable 1.5 und SIP konform
- Zukunftssichere Full Service Plattform
- RDK-B Open Source Software
- SNMP und TR-069 Remote Management
- Dual Stack IPv4 und IPv6 DS-Lite Enabled

NETZGERÄT

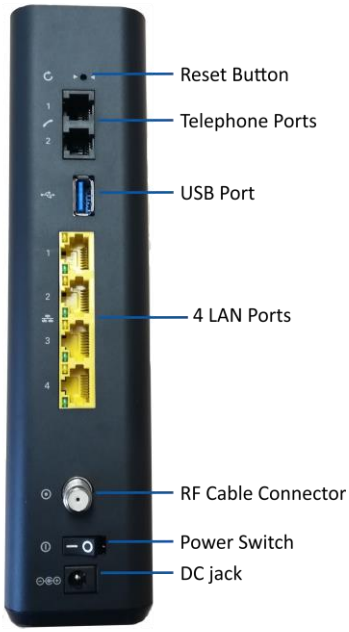
- 12 V DC
- 3.2 A
- 38.4 W

LIEFERUMFANG

A CGA4233 Gateway
B Sicherheitsinformationen
C Ethernet-Kabel
D Netzteil



BEDIENELEMENTE



SPEZIFIKATIONEN

HARDWARE	
Interfaces WAN	Interfaces WAN 1 F-Type RF connector, external threaded
Interfaces LAN	4-port autosensing 10/100/1000 Base-T Ethernet LAN switch IEEE 802.11n 2.4 GHz Wi-Fi IEEE 802.11ac Wave 2 5 GHz Wi-Fi 2 FXS POTS ports 1 USB 3.1 Gen 1 master port
Buttons & indicators	Up to 9 LEDs (model dependent) Wi-Fi on/off button WPS button Reset button (recessed) Power button
Power input	DC jack
Power supply	12 VDC external PSU
AC Voltage	100 - 240 VAC, 50 - 60 Hz (switched mode PSU)
Operating temperature	0 - 40 °C (32 - 104 °F)
Operating humidity	20 - 95 % HR non-condensing
Storage temperature	-20 - 70 °C (-4 - 158 °F)

CABLE CERTIFICATIONS	
Data	DOCSIS® 3.1 Certified EuroDOCSIS® 3.0 Certified
Voice	PacketCable™ 2.0 compliant EuroPacketCable™ 1.5 Certified
CMTS interoperability	Any qualified DOCSIS 3.1 CMTS Any qualified DOCSIS®/EuroDOCSIS® 3.0 CMTS
RF DOWNSTREAM	
Downstream modulation	64 - 4096 QAM
Downstream frequency range, software selectable	EuroDOCSIS 3.0 108 - 1218 MHz 258 - 1218 MHz
Number of downstream channels	DOCSIS 3.1 2 OFDM EuroDOCSIS 3.0 Up to 32 bonded
Maximum downstream rates	DOCSIS 3.1 Up to 3.6 Gbps Up to 5 Gbps with 32 SC-QAM EuroDOCSIS 3.0 1780 Mbps (theoretical, 32 x 55.62 Mbps)
Capture windows	1.2 GHz full band capture
Channel bandwidth	DOCSIS 3.1 192 MHz EuroDOCSIS 8 MHz
Input signal level range	-15 dBmV / + 15 dBmV
Input impedance	75 Ohm
RF UPSTREAM	
Upstream modulation QPSK	8 - 4096 QAM
Upstream frequency range, software selectable	EuroDOCSIS 3.0 5 - 85 MHz 5 - 204 MHz
Number of upstream channels	DOCSIS 3.1 2 OFDMA EuroDOCSIS 3.0 Up to 8 bonded
Maximum upstream rates	DOCSIS 3.1 Up to 1.5 Gbps EuroDOCSIS 3.0 262 Mbps (theoretical, 8 x 32.78 Mbps)
Channel bandwidth	DOCSIS 3.1 96 MHz EuroDOCSIS 3.0 200, 400, 800 kHz, 1.6, 3.2 and 6.4 MHz
Output impedance	75 Ohm
Upstream Diagnostics Analyzer	

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 Wave 2 AP
2.4 GHz Wi-Fi power	Standard: Up to 20 dBm (100 mW EIRP) High Power (optional): Up to 33 dBm (2000 mW EIRP)
5 GHz Wi-Fi power	Up to 36 dBm (4000 mW EIRP)
Wi-Fi Protected Setup (WPS™)	
Wi-Fi security levels	• WPA2™-Enterprise / WPA™-Enterprise • WPA2™-Personal / WPA™-Personal • IEEE802.1x port-based authentication with RADIUS client
Wi-Fi Multimedia (WMM®) and WMM-Power Save	
Up to 8 BSSIDs (virtual AP) per radio interface	
3x3 MIMO 2.4 GHz Wi-Fi features	SGi STBC 20/40 MHz coexistence
4x4 MU-MIMO 5 GHz Wi-Fi features	SGi STBC LDPC (FEC) 20/40/80/160 MHz mode Multi-User MIMO
RX/TX switched diversity	
Dynamic rates switching for optimal wireless rates	
Manual/ auto radiochannel selection	
VOICE AND TELEPHONY	
Audio codecs	ITU-T G.711 PCM A-law, PCM µ-law, ITU-T G.728, G.729a, G.722.1 Wideband ITU-T G.722.2 iLBC, BV16 SMV (optional)
Multi-line phone support	2 phone lines 3-party conference calls Supports two complex voice codecs simultaneously
Fax relay	T.38
DTMF tone relay	RFC 2833
Caller ID	Type I and Type II
CLASS features	Basic and extended CLASS features
Voice Activity Detection (VAD)	
Comfort Noise Generation (CNG)	
Echo cancellation	G.165 G.168 up to 16 ms
Packet tone	DTMF generation Call progress generation Custom tone generation
Call discrimination	Fax and modem detection
Telephony interface capabilities	Loopback and on-demand diagnostics
Modems	Up to V.90 (38.5 kbps)
RFC 2833 DMTF tone relay	Enabled / disabled via SNMP
REN	3 REN per device
Pulse dialing	DTMF/pulse tones Pulse/DTMF tones conversion
RTP layer	RFC 1889 RFC 1890
RTCP statistics collection	
MANAGEMENT	
User-friendly GUI via HTTP	
Web-based user interface management and administration	
Command Line Interface (CLI)	Telnet SSH v
TR-069 CPE WAN Management Protocol (CWMP)	TR-098 Internet Gateway Device (IGD) data model TR-104 voice service provisioning and configuration TR-143 network throughput performance tests and statistical monitoring TR-181i2 Device:2 data model
SNMP	SNMP v1, SNMP v2, SNMP v3
Software upgrade	via WAN RF connection only
Zero-touch autoprovisioning	

SERVICES	
Open architecture for 3rd party application and UI development	
Life Cycle Management (LCM) for developing advanced services support	
3G/LTE/4G mobile fall-back WAN connection (through USB adapter)	
Capable to support Wi-Fi Doctor® (sold separately) and Wi-Fi Conductor (sold separately)	
Wireless hotspot	
Parental control	URL-based website filtering Time-based access control
NETWORKING	
Routing modes	Transparent bridging Routed modes
Multiple client support	32 (briged mode)
Network protocols	Dual stack IP (IPv4, IPv6) TCP, UDP ARP, ICMP, DHCP TFTP, SNMP, HTTP, Telnet
Discovery protocols	UPnP
Protocol filtering	Ethernet and IP
Symmetrical NAT with application helpers (ALGs)	
Game and application sharing NAT port maps	
DHCP conditional serving & relay	
DNS server & relay	
IGMPv3 proxy (Fastleave)	
IEEE 802.1q VLAN bridging, multiple bridge instances	
IPV6 NETWORKING	
IPv4 / IPv6 dual IP stack	
Transitioning	DS-Lite
QUALITY OF SERVICE	
Class of services	32 downstream IDs 32 upstream service flows
Traffic prioritization	DOCSIS 1.0, 1.1 (management of service flows)
IP QoS	Flexible classification (ALG aided) IP rate limiting (two-rate remarking/dropping) DSCP (re)marking Dynamic link fragmentation
Ethernet QoS	Priority or C-VLAN/S-VLAN tagging Ethernet switch port queuing and scheduling
Wireless QoS	WMM (BE, BK, VI, VO access categories) queuing and scheduling
SECURITY	
Baseline Privacy Interface Plus (BPI+)	
Stateful Packet Inspection Firewall (SPIF)	
Customizable firewall security levels	
Intrusion detection and prevention	
DeMilitarized Zone (DMZ)	
Multilevel access policy	
Security and service segregation per SSID	
ECO DESIGN	
WMM-Power Save	
PACKAGE CONTENTS	
CGA4233	
Power supply unit	
Ethernet cable	
Quick Setup leaflet(s) (optional)	
Safety Instructions & Regulatory Information booklet	