

## TECHNICOLOR TC 7230

### Docsis 3.0 Wireless 11ac Voice Cable Gateway

- EuroDOCSIS 3.0
- Dual mode DOCSIS/EuroDOCSIS
- Backward compatible with (Euro)DOCSIS 2.0 (and older)
- 24 bonded Downstream and 8 bonded Upstream Channels
- Voice EuroPacketCable 1.5 compliant
- 4 GbE LAN ports
- Wireless Networking on-board:
  - IEEE 802.11n 2.4 GHz (2x2)
  - IEEE 802.11ac 5.0 GHz (3x3)
- 2 FXS Ports for Phone or Fax
- 1 USB 2.0 Master Port
- Future-proof full Service Platform supporting:
  - Qeo Communication Framework and Apps
- IPv4 and IPv6 DS-Lite Support



### Spezifikationen/ Specifications

Hardware Specifications		Services	
Interfaces WAN	1 RF connector F-Type	Support of Qeo communication framework and apps, including access to real time diagnostics	
Interfaces LAN	4-port auto-MDI/MDI-X 10/100/1000 Base-T, LAN switch (RJ-45), Wi-Fi IEEE 802.11n 2.4 GHz on board, WiFi IEEE 802.11ac 5.0 GHz on-board, 2x FXS POTS ports (RJ-11), 1 USB 2.0 master port		
Interfaces other	Power button, WPS button, Reset button	Parental control	URL- and content-based website filtering
Dimensions	218 x 63 x 160 mm (8.6 x 2.5 x 6.3 in)	Content sharing	file server, DLNA DMS
Power supply	120-240 VAC, 50-60 Hz	<b>Security</b>	
Operating temperature	0° to 40° C (32° - 104° F)	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	
Operating humidity	20 % to 90 % non-condensing	<b>Networking</b>	
<b>Cable Certifications</b>		Network protocol	IP, TCP, UDP, ARP, ICMP, DHCP, TFTP, HTTP
Data	EuroDOCSIS 3.0 compliant	SNMP management	SNMP v2, SNMP v3
CMTS interoperability	Any qualified EuroDOCSIS / DOCSIS CMTS	<b>Software</b>	
<b>Receiver Specifications</b>		Multiple client support	254
Downstream modulation	QAM 64/256	Class of Services	32 DSIDs and 32 Service Flows
Downstream frequency range	108 - 1002 MHz	Security	BPI+
Max. downstream data range	1.2 Gbps (theoretical), (55.61 Mbps x 24 channels)	<b>Telephony</b>	
Capture windows	Full Band: possibility to have any of the 16 downstream channels over the full EuroDOCSIS spectrum	Audio codecs	PCM A-law, PCM μ-law, G 729, G 729a/e, G 728, iLBC and BV16
No. of downstream channels	Up to 24	Multi-line phone	2 phone lines, 3-party conference calls, 2 complex voice codecs simultaneously
Input signal level range	-15 dBmV / + 15 dBmV	Fax relay	T.38
<b>Transmitter Specifications</b>		Caller ID	Type I and Type II
Upstream modulation	QPSK 8,16,32,64 and 128 QAM	CLASS features	Basic and extended CLASS features
Upstream frequency range	5 - 85 MHz	Voice Activity Detection (VAD)	
Max. upstream data range	240 Mbps (theoretical), (32.78 Mbps x 8 channels)	Comfort Noise Generation (CNG)	
Number of upstream channels	8	Echo cancellation	G.165, G.168 up to 16 ms
Channel bandwidth	200, 400 and 800 kHz, 1.6, 3.2 and 6.4 MHz	Packet tone	DTMF generation, Call progress generation, Custom tone generation
Output impedance	75 Ohm	Call discrimination	Fax and modem detection
<b>Wireless Specifications</b>		Modems	Up to V.90 (38.5 kbps)
2.4 GHz (2x2) IEEE 802.11n AP, 5.0 GHz (3x3) IEEE 802.11ac AP with IEEE 802.11		Pulse dialing	DTMF/pulse tones, Pulse/DTMF tones conversion
Wi-Fi security levels	IEEE802.1x port-based authentication with RADIUS client , WPA2-Personal/WPA-Personal, WEP	RTP layer	RFC 1889, RFC 1890
3x3 MIMO 5GHz WiFi features	Sgi, STBC, 20/40/80 MHz mode	SIP based protocols	