

TECHNICOLOR TC4400

ULTRA-BROADBAND CABLE MODEM

The TC4400 cable modem is fully compliant with the latest DOCSIS 3.1 specification as published by CableLabs® and is capable of delivering downstream cable speeds of up to 3.6 Gbps by using 2 Orthogonal Frequency-Division Multiplexing (OFDM) downstream channels (and up to 5 Gbps in case of 32 Single Carrier QAM) and up to 1.5 Gbps upstream by using 2 Orthogonal Frequency-Division Multiple Access (OFDMA) upstream channels.



- 2 x 2 OFDM(A) bonded channels in DOCSIS 3.1 mode
- 32 x 8 bonded channels in DOCSIS 3.0 mode
- 2 GE LAN ports
- DOCSIS 3.1 compliant
- Backward compatible with (Euro)DOCSIS® 3.0
- Switchable diplexer for upstream and downstream frequency up to 204 MHz split
- Up to 1.2 GHz full band capture tuner
- Built in RF spectrum analyzer
- Dual stack IPv4 & IPv6 enabled
- Designed to meet the latest ECO standards

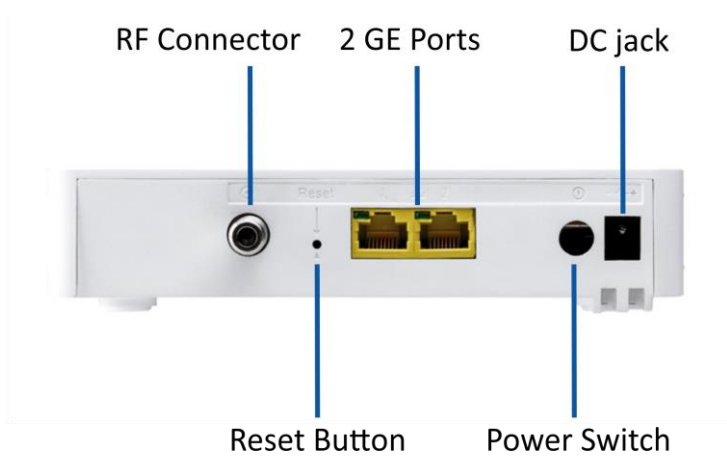
PACKAGE CONTENTS

- One TC4400
- One Safety Instructions and Regulatory Information booklet
- One power adapter
- One Ethernet cable with yellow connectors (optional)

POWER SUPPLY

- 12 V DC
- 2 A
- 24 W

BACK PANEL



SPECIFICATIONS

HARDWARE	
Interfaces WAN	1 F-type RF connector, external threaded
Interfaces LAN	2 10/100/1000 Base-T Ethernet ports
Buttons	Reset button Power button (depending on model)
Power input	DC jack
Power supply	12 VDC, 24 W external PSU
AC Voltage	120 - 240 VAC, 50 - 60 Hz (switched mode PSU)
Dimensions	163 x 53 x 145 mm (8.42 x 2.09 x 5.71 in.)
Operating temperature	0 - 40 °C (32 - 104 °F)
Operating humidity	5 - 95 % HR non-condensing
Storage temperature	-20 - 70 °C (-4 - 158 °F)
CABLE CERTIFICATIONS	
Data	DOCSIS® 3.1 compliant
CMTS interoperability	Any qualified DOCSIS 3.1 CMTS Any qualified (Euro)DOCSIS® 3.0 CMTS
RF DOWNSTREAM	
Downstream modulation	64 - 4096 QAM
Downstream frequency range, software selectable	DOCSIS 3.0 54 - 1002 MHz 108 - 1002 MHz EuroDOCSIS 3.0 108 - 1218 MHz 258 - 1218 MHz
Number of downstream channels	DOCSIS 3.1 2 OFDM (Euro)DOCSIS 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 (Effective local network download throughput is 2 x 1 Gbps since limited to the maximum throughput of the available Ethernet ports) DOCSIS 3.0 1372 Mbps (theoretical, 32 x 42.88 Mbps) EuroDOCSIS 3.0 1780 Mbps (theoretical, 32 x 55.62 Mbps)
Capture windows	1.2 GHz full band capture
Channel bandwidth	DOCSIS 3.1 max. 192 MHz bands DOCSIS 3.0 6 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	DOCSIS 3.0 5 - 42 MHz 5 - 85 MHz EuroDOCSIS 3.0 5 - 85 MHz 5 - 204 MHz
Number of upstream channels	DOCSIS 3.1 2 OFDMA (Euro)DOCSIS 3.0 Up to 8 bonded
Maximum upstream rates	DOCSIS 3.1 Up to 1.5 Gbps (Euro)DOCSIS 3.0 262 Mbps (theoretical, 8 x 32.78 Mbps)
Channel bandwidth	DOCSIS 3.1 96 MHz (Euro)DOCSIS 3.0 200, 400, 800 kHz 1.6, 3.2 and 6.4 MHz
Output impedance	75 Ohm
Upstream spectral analyzer	
MANAGEMENT	
User-friendly GUI via HTTP	
Command Line Interface (CLI)	Telnet SSH v2
SNMP	SNMP v1, SNMP v2, SNMP v3
Operation, Administration & Maintenance (OAM)	ITU-T Y.1731
Software upgrade	via WAN RF connection only
Logging and alert	
NETWORKING	
Routing modes	Transparent bridging
Multiple client support	32
Class of services	16 downstream IDs 16 upstream service flows
Network protocol	Dual stack IP (IPv4, IPv6) TCP, UDP, ARP ICMP, DHCP TFTP, SNMP, HTTP, Telnet
Protocol filtering	Ethernet and IP
QUALITY OF SERVICE	
Traffic type prioritization	DOCSIS 1.0, 1.1 compliant
IEEE 802.1Q classification	
Queuing, policing, shaping	
SECURITY	
Baseline Privacy Interface Plus (BPI+)	
ECO DESIGN	
Power control features	Power reduction schemes built-in
PACKAGE CONTENTS	
TC4400	
Ethernet cable (RJ-45)	
Power supply unit	
Quick Setup leaflet(s) (optional)	
Safety Instructions & Regulatory Information booklet	