

# PB-TDM1-CONTRA Series

## Contra G.703 64Kbps CESoPSN Unit

(1) DB15 Port + (2) 10/100/1000Base-T Ports  
+ (1) 100/1000Base-X SFP Slot



The PB-TDM1-CONTRA Series enables a Contra-clocked, 64Kbps G.703 circuit to be transported over Ethernet or IP networks. The units are typically deployed in pairs, connecting the Contra clocked CPE across the packet network. Point to multi-point applications are supported with a maximum of 16 slaved devices connecting to a master unit.

For Contra applications requiring low latency operation, comprehensive features are available via the management system to tune the unit's performance.

### Features

- Multi-standard TDM pseudowire support: CESoPSN, SATOP, TDM over IP
- Highly accurate & stable clock recovery
- Oscillator Performance
  - Hold-over 24hrs 150ppb (typical)
  - Aging per day 10ppb
  - Temperature Stability 12ppb
- G.823/4 Synchronization levels
- Contra port
  - 1 port - DB15 (female) connector
  - G.703 64kbps contra
  - Presents as DCE (cables for DTE)
  - ITU G.706
  - Transparent to user signaling
- Support for Jumbo Packets up to 9,600 bytes on Ethernet ports
- Port based VLAN, IEEE 802.1Q VLAN including Q-in-Q
- Link Aggregation Control Protocol (LACP)
- Ring Protection: MSTP, RSTP, STP
- SNMP v1, v2c and v3
- RMON and Syslog
- Management via CLI, Telnet, SSH, SSL, SNMP, Web GUI
- Authentication: Radius, TACACS+, IEEE 802.1x
- IGMP Snooping
- LLDP
- IPv6 and IPv4 dual protocols
- Firmware/Configuration backup/restore via Web/FTP

### Specifications

|                |  |
|----------------|--|
| Standards      | IEEE 802.3<br>IEEE 802.3u<br>IEEE 802.3z<br>IEEE 802.3ab<br>IEEE 802.3x<br>IEEE 802.3ad<br>IEEE 802.1p<br>IEEE 802.1Q<br>IEEE 802.1w<br>IEEE 802.1s<br>IEEE 802.1x<br>IEEE 802.1AB<br>ITU-T G.823/4<br>ITU-T G.703   |
| Ports          | (1) Contra DB15 (female) connector<br>(2) 10/100/1000Base-T RJ-45 ports<br>(1) 100/1000Base-X SFP slot (empty)<br>(1) RJ-12 console port   |
| Dimensions     | Width: 8.86" [225 mm]<br>Depth: 7.87" [200 mm]<br>Height: 1.73" [44 mm]  |
| Power Input    | AC Version<br>Bale lock cable clamp<br>Auto-sensing 100VAC-240VAC, 47-63Hz<br>Max consumption 0.2A @ 230VAC<br>Typical Consumption 18 Watts<br><br>DC Version<br>External presentation -48VDC, 0Vdc and GND via external screw down termination<br>Wide input range -18V to -72V<br>Typical consumption 13 Watts |
| Environment    | Operating: 0°C to +60°C<br>Humidity: 10% to 90% (non-condensing)   |
| Weight         | 5.73 lbs. [2.6 kg]   |
| Certifications | CE Mark<br>EN60950-1:2006+ A11:2009+ A12:2010+ A12:2011<br>EN50121-4:2006, EN61000-3-2:2006+ A1&A2:2009<br>FCC CFR47 Parts15: 107&109,<br>CB Scheme Certified  |
| Warranty       | 1 Year   |



### Ordering Information

#### PB-TDM1-CONTRA-AC

- (1) DB15 port
- + (2) 10/100/1000Base-T ports
- + (1) 100/1000Base-X SFP slot (empty)
- AC input (serial control cable included)

#### PB-TDM1-CONTRA-DC

- (1) DB15 port
- + (2) 10/100/1000Base-T ports
- + (1) 100/1000Base-X SFP slot (empty)
- 48VDC input  
(serial control cable included)

Optional Accessories (sold separately)

#### SFP Modules

#### PB-RMK-S

- 19" rack mount kit for  
PB-TDM1-CONTRA Series

### Features Continued

- TDM packets can be assigned IP Diffserv (DSCP) or ToS and IEEE 802.1p CoS values
- Supports full IEEE 802.1Q tagging & associated IEEE 802.1p CoS prioritization levels
- All egress packets, including TDM links, can be prioritized across four output queues
- Various clocking options for different network types & clock recovery requirements
- Quality of Service: Supports 8 hardware queues with strict priority and WRR, shaping, policing. Per port bandwidth management.

### Applications

- Contra

#### Power Cord Included

To order the corresponding country specific power supply, add the extension from the list below to the end of the SKU; Ex: PB-TDM1-CONTRA-AC-NA

- NA = Country Code
- NA = North America
- LA = Latin America
- EU = Europe
- UK = United Kingdom
- SA = South Africa
- JP = Japan
- OZ = Australia
- BR = Brazil