

# Tellabs® 1000 Multiservice Access Platform: OC3c Transceiver (OC3c-XCVR)

Delivers voice, TDM, premium HSI and HiCAP services over fiber.

The Tellabs® 1000 Multiservice Access Platform (MSAP) OC3c Transceiver (OC3c-XCVR) plug-in card functions as a 155 Mbps uplink, service, and transport between Tellabs 1000® MSAP terminals. The OC3c-XCVR card is compatible with SONET OC-3c standards per GR-253-CORE. All capabilities are provisioned through the craft interface or Tellabs® Panorama™ Integrated Network Manager (INM).

Tellabs 1000 MSAP products and plug-in cards greatly expand broadband capabilities in the access network, enhancing the foundation for emerging services. With simple in-service upgrades, service providers obtain the capacity and Time Division Multiplexing (TDM) and ATM Quality of Service (QoS) to support larger populations of narrowband and broadband users — from a single integrated multiservice access platform.

The OC3c-XCVR plug-in card has a 155 Mbps fiber optic interface using SC connectors. Both a transmitter and a receiver are on a single card. The OC3c-XCVR uses a PIN receiver and a single-mode laser operating at 1310 nm.

As an uplink to the ATM data network, the OC3c-XCVR interfaces to any UNI 3.1 and UNI 4.0 compliant ATM switch or router. When provisioned as an up link, up to seven OC3c-XCVR plug-in cards are supported per terminal.

As an edge access ATM concentrator, the OC3c-XCVR delivers up to 31 ATM pipes. When used as a concentrator in a mixed mode (native ATM and edge access ATM), the OC3c can be provisioned for 5 edge access ATM pipes. The concentrator aggregates these incoming pipes into a single ATM pipe through the Tellabs 1000 MSAP. When provisioned as a concentrator, use one OC3c-XCVR plug-in card per Tellabs 1000 MSAP modular shelf.

As an ATM service card, the OC3c-XCVR provides User-to-Network Interface (UNI) service drops. Use the OC3c-XCVR provisioned as an ATM service card for applications requiring interface to co-located equipment with drops of no less than 3 feet.

The card uses powering and heat dissipation technologies available in the Tellabs 1000 MSAP modular shelf. When provisioned as an inter-terminal transceiver, the card may be inserted into any of the 22 general purpose slots of the Tellabs 1000 MSAP channel bank.

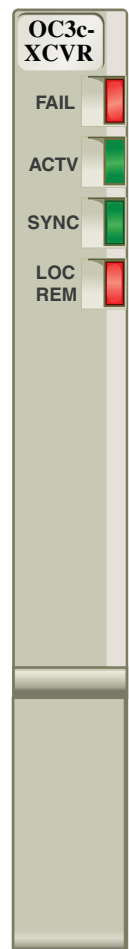
All Tellabs 1000 MSAP plug-in cards contain Tellabs' special Application Specific Integrated Circuit (ASIC) — the Cellennia. The Cellennia ASIC is a key Tellabs differentiator and technology enabler, providing access to the ATM cell bus in every Tellabs 1000 MSAP channel bank. Functioning as an “ATM switch on a chip,” it provides ATM switching, QoS, concentration capabilities within the Tellabs 1000 MSAP network, and conversion of TDM traffic to ATM and back again.

## LED Indicators

- Green ACTV — OC3c is active and can carry traffic
- Flashing green ACTV — card is in loopback
- Red FAIL — the card is unable to communicate with the CPU-3
- Green SYNC — uplink ATM cell synchronization; concentrator LED always off; transport card is enabled and initialized; service card is enabled and initialized
- Red LOC REM — uplink signal loss; concentrator LED always off; transport signal loss; service signal loss

## OC3c-XCVR Features

- Functions as a concentrator, an uplink to an ATM network, an inter-terminal transport, or an ATM service card
- When provisioned as an uplink or transport, provides the terminal reference timing signal
- GR-253 intermediate reach compatible (GR-253-CORE)
- 1310 nm single-mode fiber for its OC-3c interface
- PIN receiver
- 155 Mbps optical interface
- Uses two fibers: one transmit and one receive
- Dual-memory for non-service affecting programming
- Supports 2048 virtual channel connections
- SC connectors for easy installation





## Specifications

### Signaling

- Line coding: scrambled, binary NRZ
- Line rate: 155.52 Mbps

### Transmitter

- Min Launched Power: -15dBm
- Max Launched Power: -8dBm

### Receiver

- Sensitivity: -31dBm

### Environmental

- Operating temperature:  
-40° F to +149° F (-40° C to +65° C)
- Humidity: 5–95% non-condensing
- Maximum power consumption: 12.3 W

### Dimensions

- Height: 5.125 in (13.018 cm)
- Width: 0.563 in (1.429 cm)
- Depth: 10.5 in (26.67 cm)

### Weight

0.5 lbs (0.23 kg)

### Compliance

GR-253-CORE compatible

### North America

Tellabs  
One Tellabs Center  
1415 West Diehl Road  
Naperville, IL 60563  
U.S.A.  
+1 630 798 8800  
Fax: +1 630 798 2000

### Asia Pacific

Tellabs  
3 Anson Road  
#14-01 Springleaf Tower  
Singapore 079909  
Republic of Singapore  
+65 6215 6411  
Fax: +65 6215 6422

### Europe, Middle East & Africa

Tellabs  
Abbey Place  
24–28 Easton Street  
High Wycombe, Bucks  
HP11 1NT  
United Kingdom  
+44 871 574 7000  
Fax: +44 871 574 7151

### Latin America & Caribbean

Tellabs  
Rua James Joule No. 92  
EDIFÍCIO PLAZA I  
São Paulo – SP  
04576-080  
Brasil  
+55 11 3572 6200  
Fax: +55 11 3572 6225

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