



## **SLC<sup>®</sup>-2000 MSDT**

### **BDJ244 Optical Unit — SAIUNMOBAA**

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#### **Overview**

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This data sheet describes the BDF244 optical unit (OU) (COMCODE 107287385) and is intended for the end-user of the unit. The BDJ244 OU is designed to be used in the Fiber Service Module (FSM) of SLC-2000 Access Systems. It is used in FSMs at both the HDT site and the MSDT site. The OU provides electrical-to-optical and optical-to-electrical signal conversions.

#### **Features**

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The BDJ244 OU contains the following features:

- **Optical Transmitter.** This OU has an optical transmitter running a 51.84 Mb/s.
- **Optical Receiver.** This OU has an optical receiver running a 51.84 Mb/s.
- **Clock Recovery.** This OU has clock recovery for the 51.84 Mb/s.

## Functional Description

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**In the transmit direction**, the BDJ244 OU receives an electrical 51.84 Mb/s signal from the MUX circuit pack in the FSM. It converts the electrical 51.84 Mb/s signal to an optical 51.84 Mb/s signal and transmits it over one single-mode fiber to the opposite end of the loop.

**In the receive direction**, the OU receives an optical 51.84 Mb/s signal from the OU in the FSM at the far end over the same single-mode fiber and converts it to an electrical 51.84 Mb/s signal. It then sends this electrical signal to the MUX circuit pack.

## User Interfaces

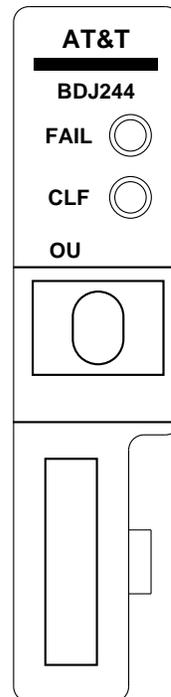
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The BDJ244 OU has the following user interfaces as shown in Figure 1:

- **Red FAIL LED.** This LED indicates a circuit pack failure. It lights when the transmitter detects a 3-dB degradation of output power. It also reports this condition through the *Microwire*\* interface to the MUX circuit pack.
- **Yellow CLF LED.** This LED indicates an open fiber or misplaced master/slave jumpers on the MUX circuit pack. The OU also reports this condition through the *Microwire* interface to the MUX circuit pack.
- **Optical Connector.** The circuit pack provides a universal optical connector on the face plate. It will accommodate either *ST*<sup>®</sup>, FC, or SC type connectors.

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\* *Microwire* is a registered trademark of Advanced Interconnection Technology, Inc.



fsmou.fp.ps

Figure 1. BDJ244 OU Faceplate

## Technical Specifications

- **Optical Specifications:**
  - **Power Output:**  $-12 \text{ dBm} \pm 2 \text{ dB}$
  - **Receiver Sensitivity:** Minimum of  $-27 \text{ dBm}$
  - **Reflection:** Maximum of  $27 \text{ dB}$
- **Temperature Range:**  $-40 \text{ degrees C to } +85 \text{ degrees C}$
- **Humidity Range:** 5% to 95%
- **Power Supply Variations:**  $+5\text{V DC } (\pm 5 \%)$  and  $-5\text{V DC } (\pm 5 \%)$

## **Technical Assistance**

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Follow local procedures for obtaining technical assistance. AT&T also provides in-hours or emergency out-of-hours help for the SLC-2000 Access System. Call the AT&T Regional Technical Assistance Center at **1-800-225-RTAC**.

## **Ordering Information**

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Call the Customer Information Center at 1-800-432-6600 to get additional copies of this document (AT&T 363-005-321).

## **Comments**

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