

DDS Type 200 Dual Slot Housing Installation and Maintenance

Contents

1. GENERAL	1
2. PHYSICAL DESCRIPTION	1
3. INSTALLATION	2
4. CONNECTIONS	3
5. SPECIFICATIONS	3
6. MAINTENANCE	4
7. WARRANTY AND CUSTOMER SERVICE	4

Figures

Figure 1. ADTRAN DDS T200 Dual Slot Housing	1
Figure 2. T200 Housing Terminal Barrier Block	2
Figure 3. T200 Housing Rear Panel	2
Figure 4. Chassis Mounting Template	3

Tables

Table 1. Wiring Connections	3
Table 2. Telecommunication Configuration Codes	3
Table 3. Specification	4

1. GENERAL

The ADTRAN DDS Type 200 Dual Slot Housing is used to house one or two standard T200 circuit packs, and is capable of performing loop termination. **Figure 1** is an illustration of the unit.

Basic Features

The basic features of the unit are listed below.

- Standalone Type 200 housing
- -48VDC power connections
- Network connection through a terminal barrier strip
- Customer connects to RJ-48S or barrier strip
- Durable, hinged metal enclosure
- Wraparound transparent front panel for easy LED viewing

The DDS T200 Dual Slot Housing is designed to accept any standard Type 200 plug-in card. For non-loop powered units, the DDS T200 Dual Slot

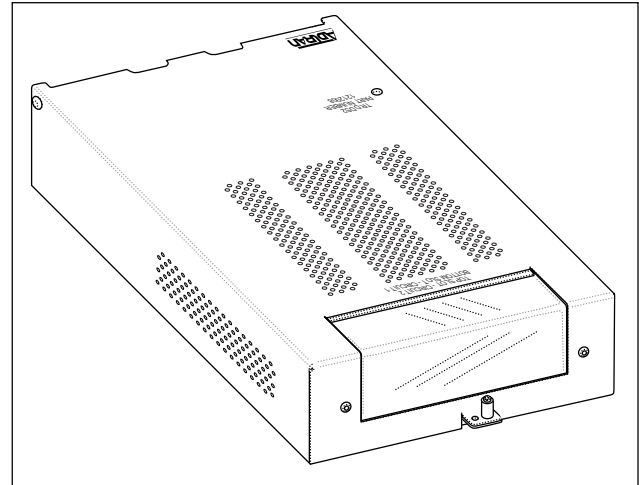


Figure 1. ADTRAN DDS T200 Dual Slot Housing

Housing can provide power to the circuit card through an external power supply. The ADTRAN 1353.DSK48V02 power supply can be used to provide -48 VDC from standard 100-120 VAC to power these cards.

The ADTRAN 1353.POWER08 supply can be used to provide -48 VDC from standard 220 VAC. These power supplies must be purchased separately. The T200 Housing also provides network and customer interface connections to the circuit card.

Revision History

This is the third release of this document. This practice has been reissued to include Telecommunication Configuration Codes and methods for locally powering the unit.

2. PHYSICAL DESCRIPTION

Figure 1 illustrates the ADTRAN DDS T200 Dual Slot Housing with the cover on. Connections are made available by unscrewing the lock screw and lifting the hinged cover.

Inside the housing are Euro-style connectors, illustrated in **Figure 2**, for connecting to the network, to the CPE, and to an external power

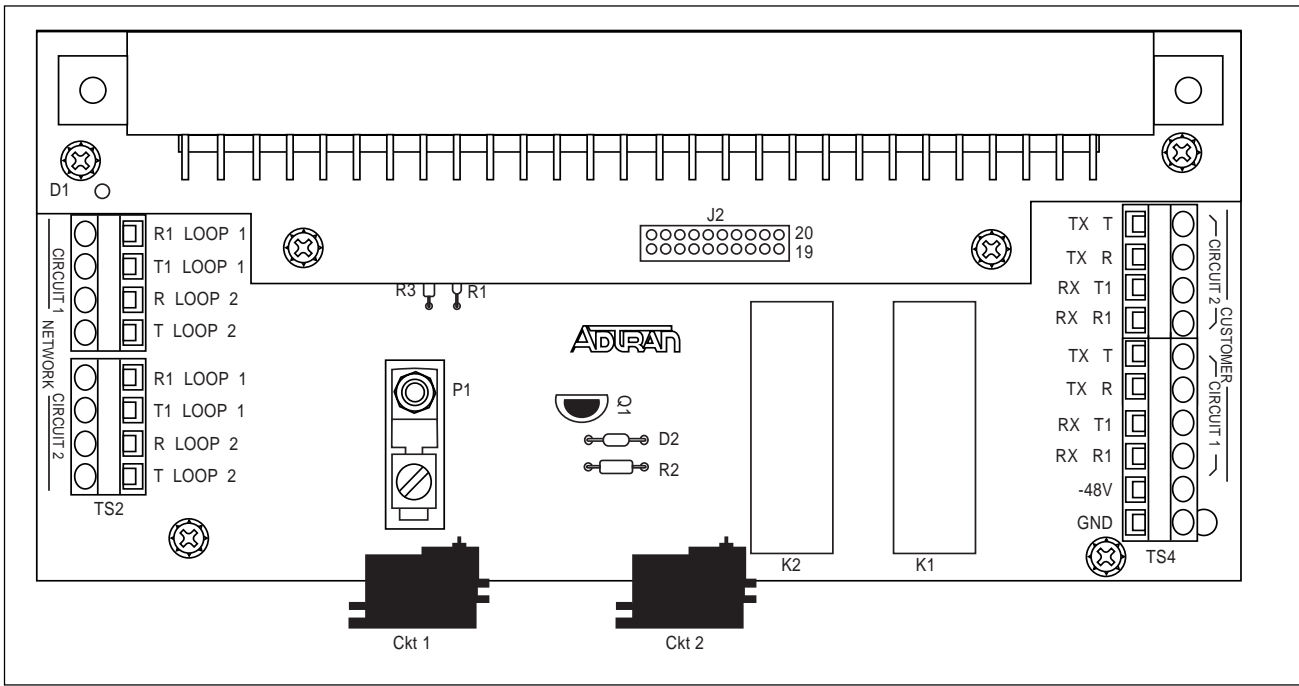


Figure 2. T200 Housing Terminal Barrier Block

source, if one is used. A grounding lug is provided for frame ground connections.

The rear panel of the T200 Dual Slot Housing contains two slots with RJ-48S jacks for CPE connections and a portal for network and power connections, illustrated in **Figure 3**.

The T200 Dual Slot Housing is 2 inches high by 6 inches wide by 9 ³/₄ inches deep, and weighs less than 1 pound. It can be mounted on a desk, table, or wall. The unit operating temperature range is -40°C to +70°C.

3. INSTALLATION

After unpacking the unit, immediately inspect it for possible shipping damage. If damage is discovered, file a claim immediately with the carrier, then contact ADTRAN Customer Service. (Refer to subsection 7, Warranty and Customer Service.)

Components shipped with the unit include the following:

- T200 chassis (including RJ-48S jack)
- Four #8 screws
- Wall mounting template

The T200 chassis is designed to be wall- or desk-mounted. For wall mounting, four #8 screws have been included. Select a suitable position on a wall or desk for installation.

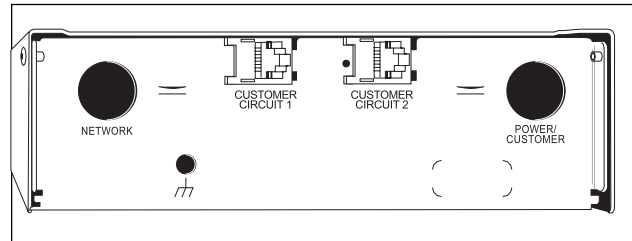


Figure 3. T200 housing Rear Panel

Figure 4 illustrates the mounting pattern in the base of the chassis. The four mounting screws should be located as shown. Drive the screws into the mounting surface, leaving a clearance of at least ¹/₄ inch, and no greater than ¹/₂ inch.

A mounting template is provided with each unit to assist in locating the drill holes. The template attaches to the wall by a tape strip located across the top of the template. Remove the template from the wall after using.

Grounding Instructions (UL 1950)

In accordance with UL 1950, a supplemental earth ground must be connected prior to connection of the telecommunication wiring. The supplemental earth ground connection shall be connected to the ground lug.

Grounding instruction information from the Underwriter's Laboratory UL 1950 Standard for

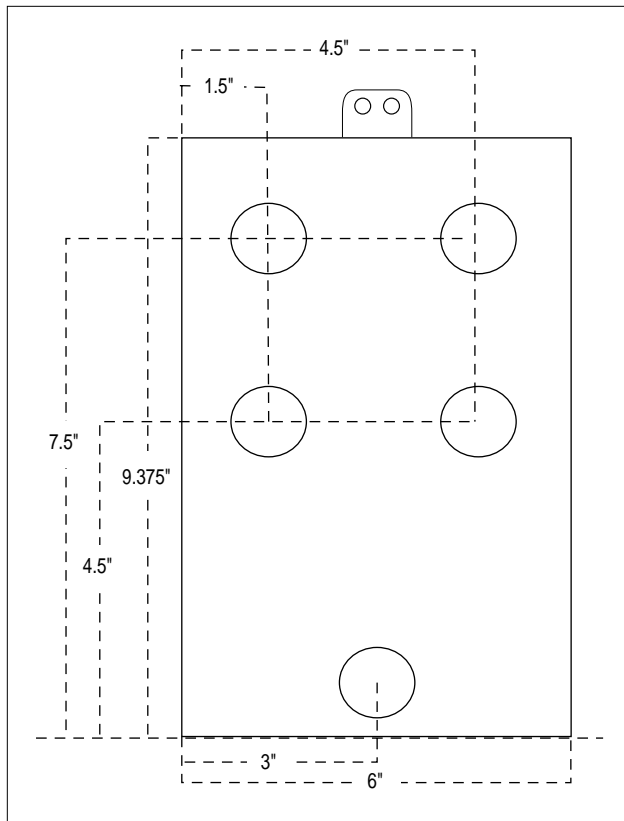


Figure 4. Chassis Mounting Template

Safety (Telephone Equipment) is provided in the following paragraphs.

In addition to the power supply grounding conductor, an equipment supplementary grounding conductor that is not smaller in size than the power supply grounding conductors, must be installed prior to connection of telecommunications wiring. In addition, the connection to the ground of the supplementary equipment grounding conductors shall be in compliance with the rules for terminating bonding jumpers in Part K of Article 250 of the National Electrical Code ANSI/NFPA 70.

Termination of the supplementary equipment grounding conductor is permitted to be made to building steel, to a metal electrical raceway system, or to any grounded item that is permanently and reliably connected to the electrical service equipment ground.

The attachment plug receptacles in the vicinity of the product or system are all to be of a grounding type, and the equipment grounding conductors serving these receptacles are to be connected to earth ground at the service equipment.

Bare, covered, or insulated grounding conductors are acceptable. A covered or insulated grounding conductor shall have a continuous outer finish that is either green, or green with one or more yellow stripes.

4. CONNECTIONS

The terminal barrier strip is used to make connections to the housing. To connect to the barrier strip, place conductor into the receptacle of each terminal. The terminal strip is connected to the card edge connector to interface the connections to the circuit card. Figure 2 illustrates the pinout of the card edge connector in relationship to the barrier strip. The RJ-48 jack, along with the terminal strip, provides for CPE connection. **Table 1** shows the wiring connections. **Table 2** shows the Telecommunication Configuration Codes.

Table 1. Wiring Connections

	DDS SIGNAL	EURO-CONNECTOR	T200 PIN NUMBER
Network	TT	T Loop 2	41
	TR	R Loop 2	47
	RT*	T1 Loop 1	7
	RR*	R1 Loop 1	13
Customer	DTT	TX T	55
	DTR	TX R	49
	DRT	RX T1	5
	DRR	RX R1	15
* Not used in Total Reach™ applications.			

Table 2. Telecommunication Configuration Codes

Code	Input	Output
IC	E	-
TC	X	X
PC	F	C



Power

The T200 Dual Slot Housing is designed to house a loop-powered or locally-powered circuit card. The terminal barrier strip provides the ability to connect an external -48 VDC supply to the circuit card. One of the following methods shall be utilized when locally powering the unit:

- Connect to a reliably grounded -48 VDC source which is electrically isolated from the AC source.
- A readily accessible disconnect device, that is suitably approved and rated, shall be incorporated in the fixed wiring.
- The branch circuit overcurrent protection shall be a fuse or circuit breaker rated minimum 48 V, maximum 20 A.
- The unit shall be installed in accordance with the requirements of NEC NFPA 70.

OR

- Connect to a Class 2 Type power supply rated 48 VDC, maximum 240 VA.

These connections are made to the -48V and GND on the barrier strip, as illustrated in Figure 2. Connection from the barrier strip to the edge card connector is illustrated in Figure 2. A ground lug (P1), illustrated in Figure 2, is provided to connect an external frame ground wire to the unit.

5. SPECIFICATIONS

The specifications for the ADTRAN T200 Dual Slot Housing are listed in **Table 3**.

6. MAINTENANCE

The ADTRAN T200 Dual Slot Housing requires no routing maintenance to operate properly. In case of equipment failure, remove the unit and replace it with another unit optioned in an identical manner.

ADTRAN does not recommend that repairs be performed in the field. Repair services may be obtained by returning the defective unit to ADTRAN.

7. WARRANTY AND CUSTOMER SERVICE

ADTRAN will replace or repair this product within 10 years from the date of shipment if it does not meet its published specifications or fails while in service (see ADTRAN Carrier Network Equipment Warranty, Repair, and Return Policy and Procedure, document 60000087-10A).

Table 3. Specifications

Mechanical	
Size	6" wide by 9 3/4" deep by 2" high
Weight	Less than 1 lb.
Mounting	Tabletop or wall-mount
Environment	
Temperature	Operating: -40°C to +70°C Storage: -40°C to +85°C
Relative Humidity	Up to 95% non-condensing

Contact Customer and Product Service (CAPS) prior to returning equipment to ADTRAN.

For service, CAPS requests, or further information, contact one of the following numbers:

ADTRAN Sales

Pricing and availability
(800) 827-0807

ADTRAN Technical Support

Presales Applications / Post-sale Technical Assistance
(800) 726-8663

Standard support hours:
Monday-Friday, 7 a.m. - 7 p.m. CST

Emergency support: 7 days/week, 24 hours/day

ADTRAN Repair/CAPS

Return for repair / upgrade
(256) 963-8722

Repair and Return Address:

ADTRAN, Inc.
Customer and Product Support (CAPS)
901 Explorer Boulevard
Huntsville, Alabama 35806-2807