I/O Companion and Smart Slot Cables

Companion and smart slot cables provide connection facilities between I/O modules and field termination assemblies (FTAs). There are a wide variety of cables available depending upon the I/O module and FTA used. Please refer to PD-TC200 and PD-TC500 for further details. Standard cables are 15 feet for internal grade and 28feet for external grade, but other lengths may be specified. Cables are also available with a flying lead at one end to allow connection to conditioned terminals.

Companion slots are used when partner I/O modules are side by side. Figure 4-23 shows both ends of a typical companion slot cable. The single wide hood connects to the FTA. The double wide hood connects to the rear of the chassis. Figure 4-24 shows one example of a companion slot cable.
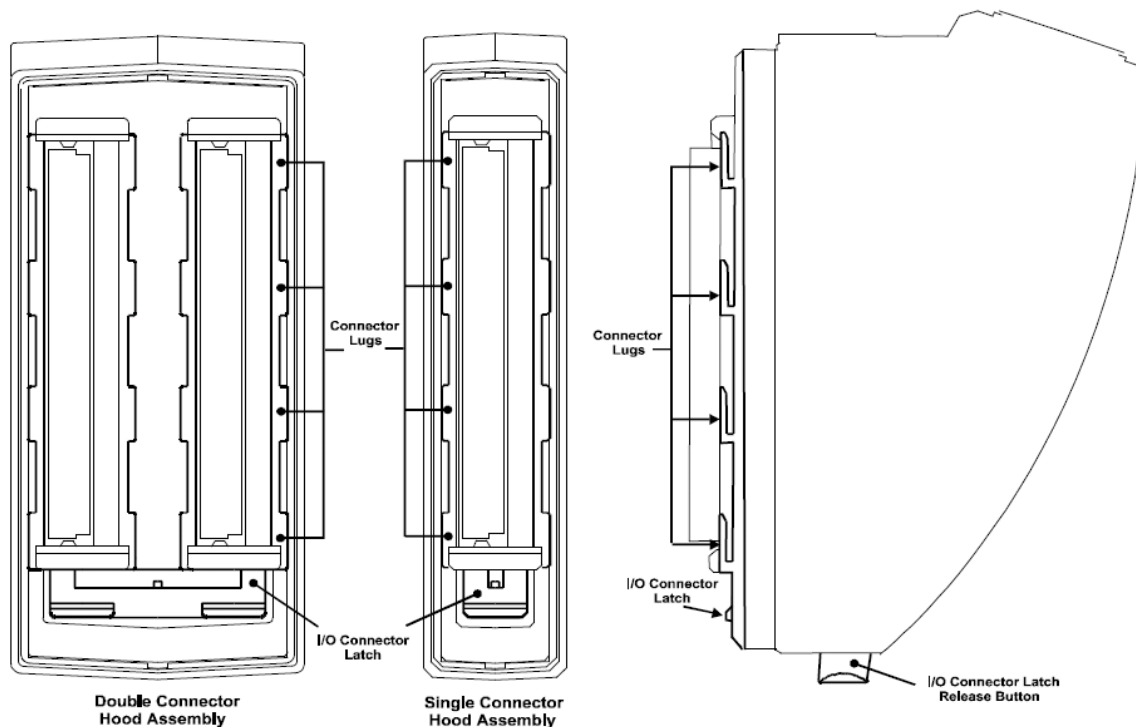

Figure 4-23: I/O Connectors

The smart slot arrangement is used when an I/O module slot is used to replicate any module located anywhere in the system. Figure 4-23 shows one example of a smart slot cable. Both ends are single width.

Figure 4-24: Typical Companion Slot Cable
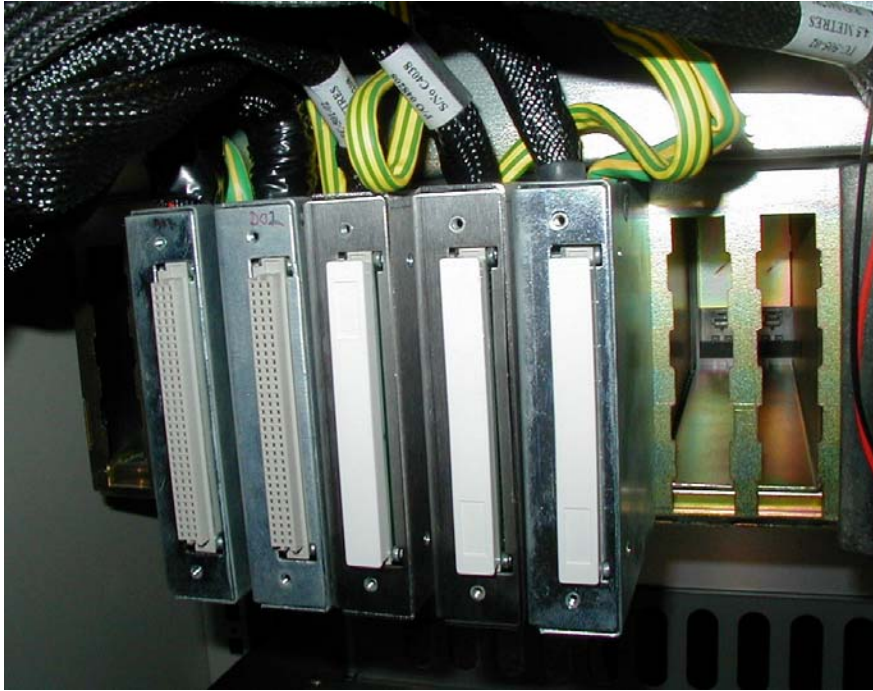

Figure 4-25: Typical SmartSlot Cable
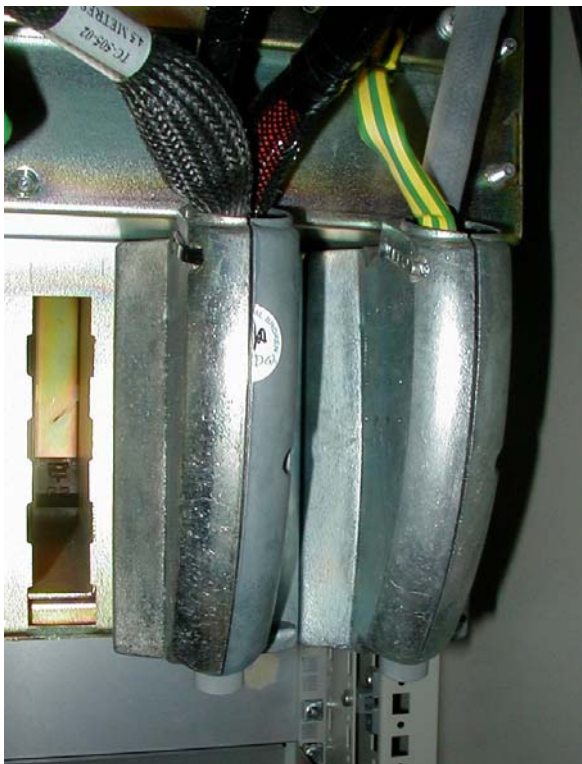
Figure 4-26: View of SmartSlot Connectors

Figure 4-27: View of Companion Slot Connectors

Module
T8403
T8423
T8431

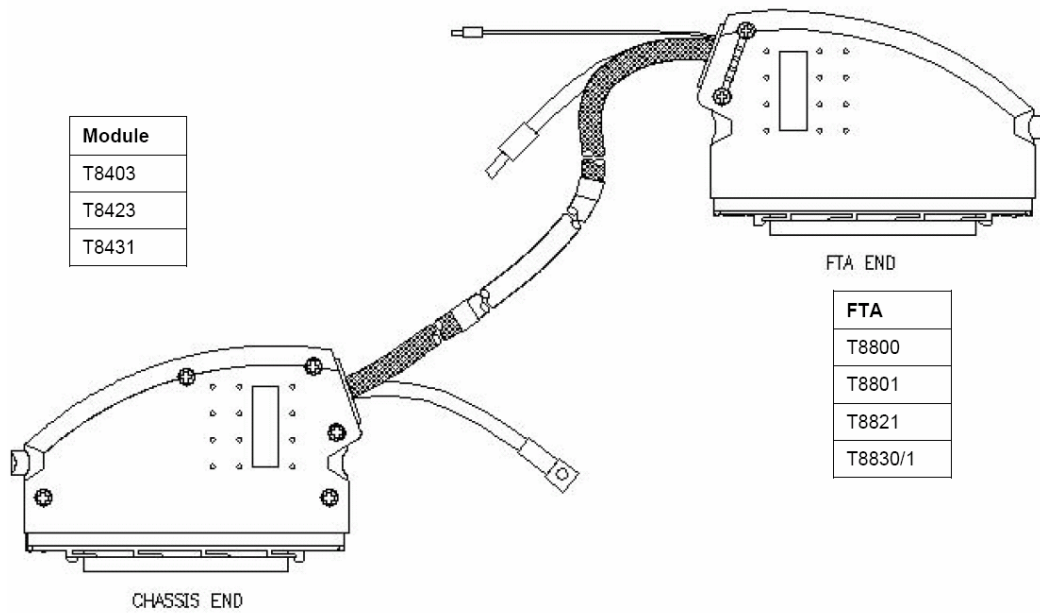| FTA |
|--------|
| T8800 |
| T8801 |
| T8821 |
| T8830/1 |

FTA END

CHASSIS END

Figure 4-28: TC-201 Input Companion Slot Cable

Figure 4-28 shows a typical cable for inputs. Figure 4-29 shows a typical cable for outputs. Note the additional connections coming from the output chassis hood to the T8290 output power distribution unit (described below).
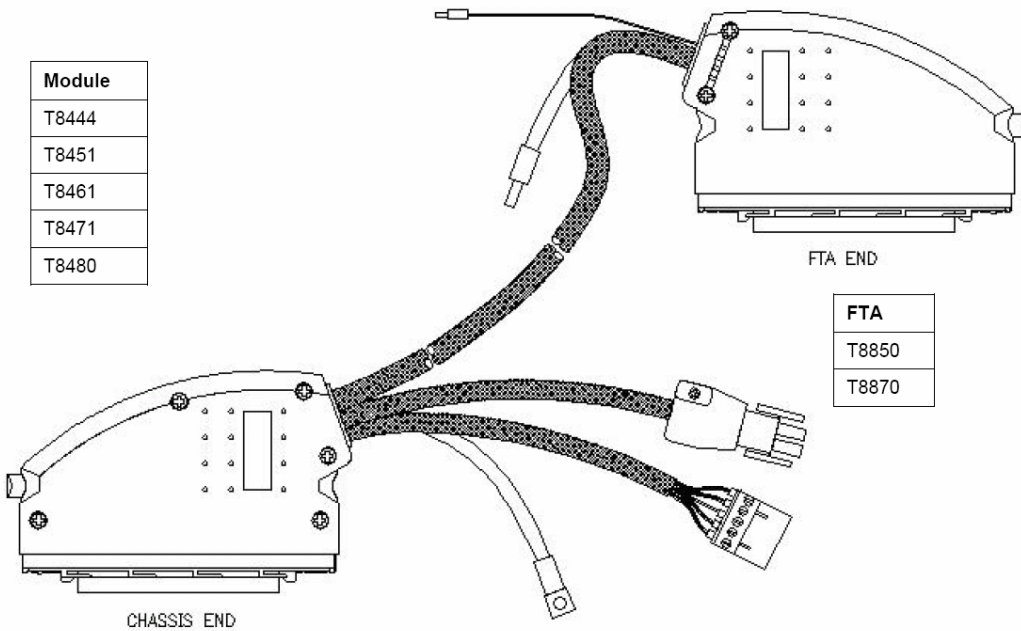

Module
T8444
T8451
T8461
T8471
T8480

FTA
T8850
T8870

FTA END

CHASSIS END

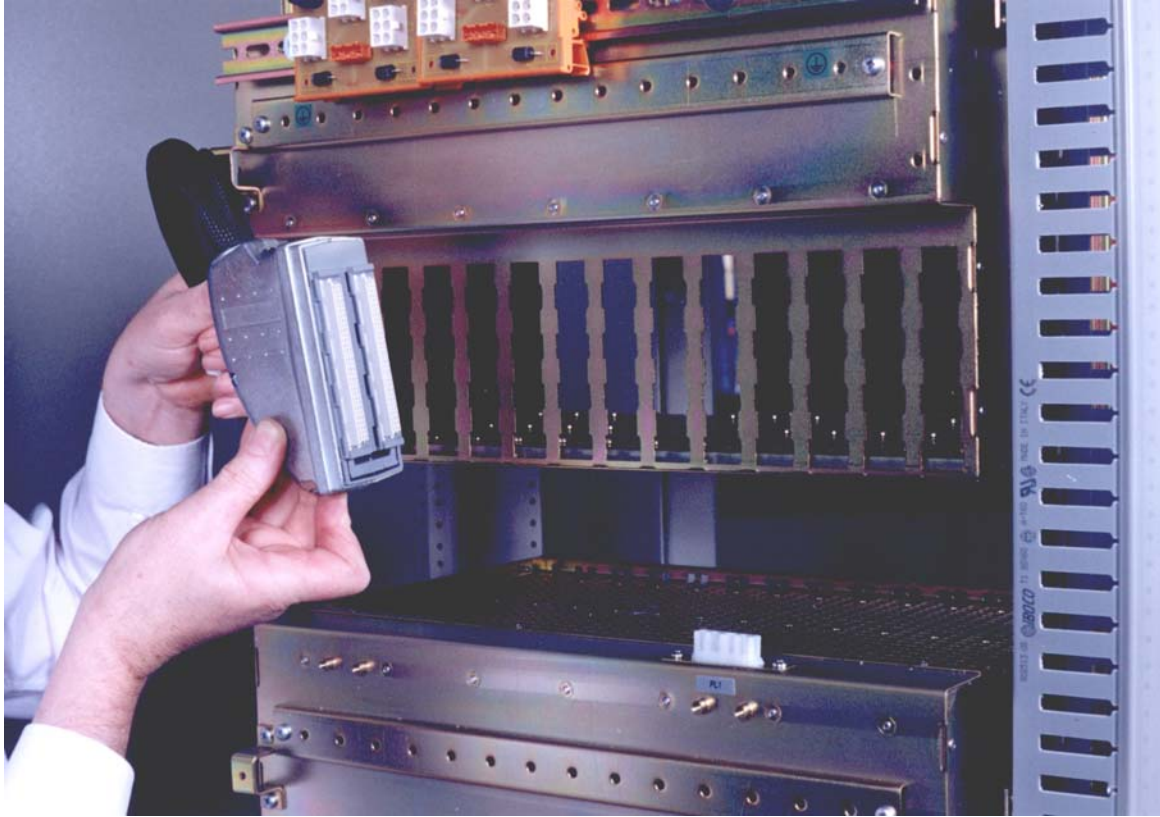**Figure 4-29: TC-205 Output Companion Slot Cable**

Figure 4-30: Connecting a Companion Slot Connector (1 of 2)

To install one end of the cable to the rear of a Controller or Expander chassis:
1. Identify the correct location where the I/O module will be installed
2. Ensure the slot is not occupied by a module
3. Line up the tabs on the connector with the slots in the chassis
4. Insert the connector into the chassis
5. Slide the connector up until it snaps in place.

To remove the connector, press the release button on the bottom of the connector and slide the connector down to release it.

Note: The connector cannot be installed or removed with an I/O module or shield (blank) installed in either slot.

The other side of the cable connects to the Field Termination Assembly in a similar manner.

Smart slot cables connect in the same manner. The only difference is that the connector at the chassis end is a single width connector.
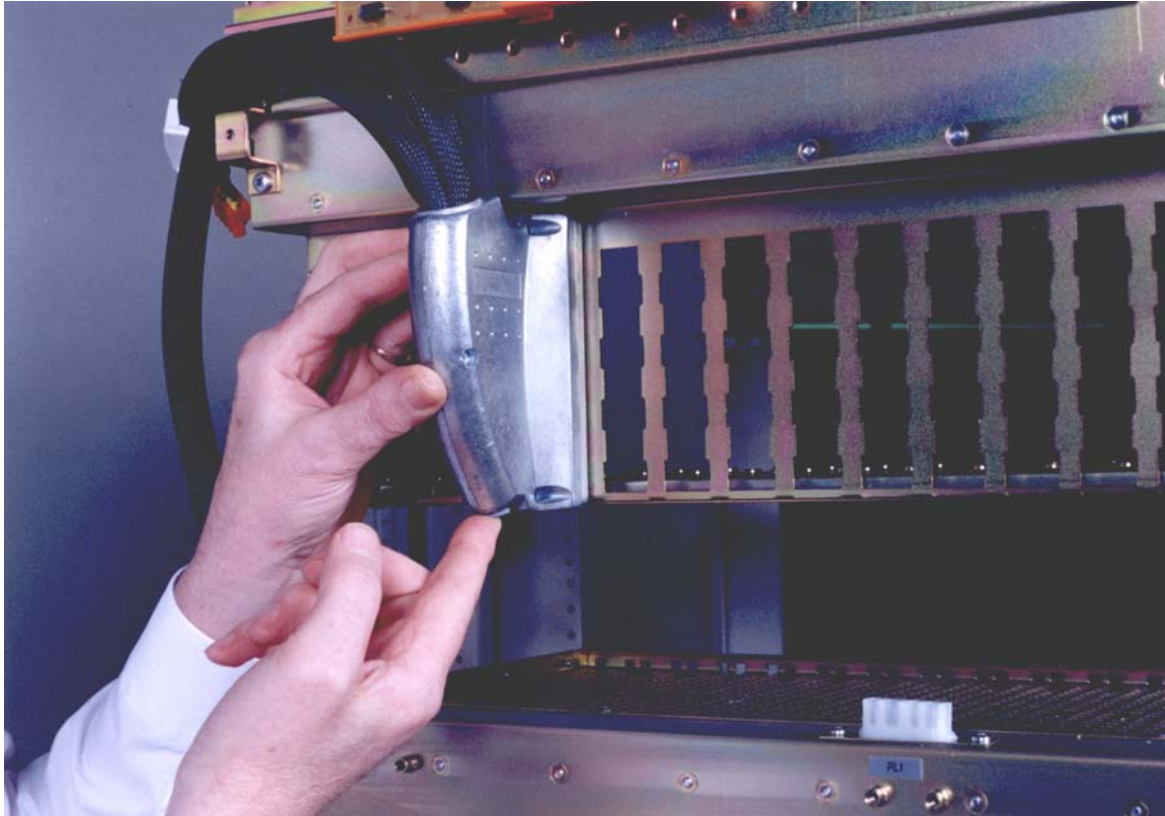
Figure 4-31: Connecting a Companion Slot Connector (2 of 2)