

## PRODUCT PROFILE # 553C

# CTU II Coupler/Termination Unit II

This device is used with the INTREPID™ MicroPoint™ II and MicroNet™ II Fence Detection System. The Coupler/Termination Unit II (CTU II) provides coupling of power and data between MicroPoint II processor modules (PM II) and MicroNet II processor modules (MPM II) and can also be used as the termination unit at the end of the MicroPoint cable from a PM II or MPM II.

Because the CTU II is a passive device, which is sealed when installed, it requires no monitoring of a tamper condition. It is therefore an ideal solution for applications with a requirement to monitor a tamper switch on an enclosure that can be opened.

The CTU II includes a circuit board, pipe enclosure, end caps with strain relief connectors, end cap, small cable ties for terminating MicroPoint cable, dielectric grease and large cable ties for securing the pipe to the fence as shown in Figure 1. The unit with end caps installed is 14.5 inches (368mm) long. It is a 2 inch (50.8mm) diameter ABS pipe. It weighs 2.4lb (1.08kg).

The enclosure **MUST** be filled with a re-enterable encapsulant, foam, insulating resin or potting compound (non-conductive) to protect the unit from moisture ingress and prevent tampering. Non-conductive potting compound (Part # 54A46102-A01, is available from Southwest Microwave. Contact Southwest Microwave for pricing. A potting compound, such as 3M's 8882 High Gel Re-enterable Encapsulant, or other equivalent compounds may also be sourced locally.



Figure 1

## Installation Instructions

First, determine how the CTU II is to be used. Will it be a Coupler Unit, an isolating Coupler Unit or a Termination Unit? To configure as a Coupler Unit, cut jumper “J3” on the circuit board as shown in Figure 2. To configure as a Termination Unit, cut jumpers “J4 and J5” on the circuit board as shown in Figure 2. To configure as an Isolating Coupler Unit, cut jumpers “J1, J2 and J3” on the circuit board as shown in Figure 2. Figure 2 shows a top view, side view and back view of the circuit board. **Configuring the CTU II must be done before the MicroPoint cables are connected and the board inserted into the pipe.**

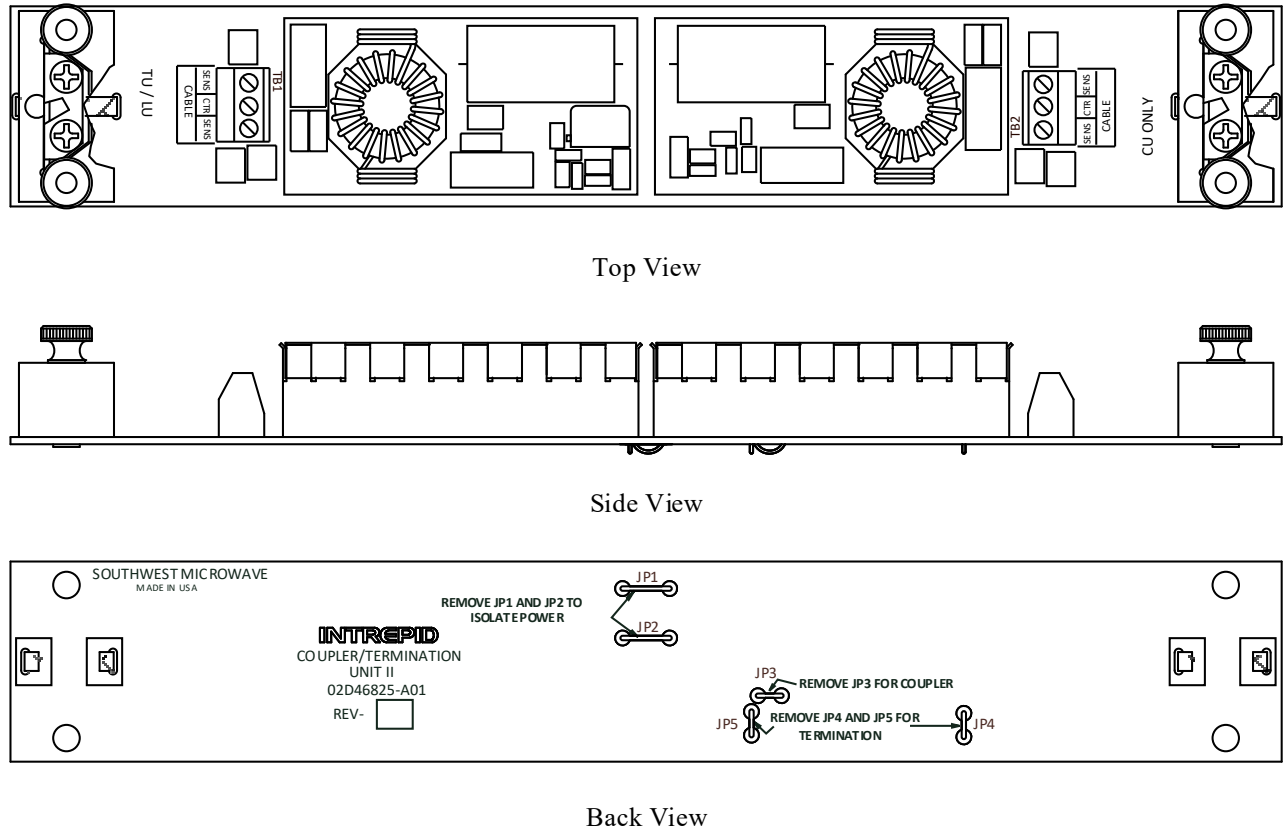


Figure 2

## Termination Unit Configuration

If using as a Termination Unit **be sure jumpers “J4 and J5” have been removed.**

1. Attach an end cap that has a strain relief with ABS cement (not supplied) to one end of the pipe.
2. Insert the MicroPoint cable through the end cap.
3. Orient the CTU II board so that the MicroPoint cable will be attached to the terminal strip labeled TB1 (TU / CU).
4. Terminate the MicroPoint cable to the terminal strip and apply the dielectric grease as described in the MicroPoint II manual, Chapter 5. Make sure there is enough cable for the 6 foot (1.8m) drip loop.
5. Slide the CTU II circuit board into the pipe and tighten the strain relief on the cable. Test with UIST II software to ensure that no cable fault exists.
6. Attach the end cap that has no strain relief with ABS cement (not supplied) to the other end of the pipe.
7. Prepare the potting compound. Turn the pipe upright and fill with the potting compound. Tilt the pipe left and right to evenly distribute the potting compound around the CTU II circuit board.
8. Attach the CTU II horizontally to the fence fabric with the supplied large cable ties.
9. Attach the MicroPoint cable to the fence with drip loops.

## Coupler Unit Configuration

If using as a Coupler Unit *be sure jumper “J3” has been removed.*

1. Attach an end cap that has a strain relief with ABS cement (not supplied) to one end of the pipe.
2. Insert the MicroPoint cables through both end caps with strain reliefs.
3. Terminate the MicroPoint cables to the terminal strips labeled TBI and TB2 and apply the dielectric grease as described in the MicroPoint II manual, Chapter 5. Make sure there is enough cable for the 6 foot (1.8m) drip loop.
4. Slide the CTU II circuit board into the pipe and tighten one strain relief on the cable. Test with UIST II software to ensure that no cable fault exists.
5. Attach the other end cap with ABS cement (not supplied). Tighten strain relief.
6. Prepare the potting compound. Turn the pipe upright and fill with the potting compound. Tilt the pipe left and right to evenly distribute the potting compound around the CTU II circuit board.
7. Attach the CTU II horizontally to the fence fabric with the supplied large cable ties.
8. Attach the MicroPoint cables to the fence with drip loops.

## Isolating Coupler Unit Configuration

If using as an Isolating Coupler Unit *be sure jumpers “J1, J2 and J3” have been removed.*

1. Attach an end cap that has a strain relief with ABS cement (not supplied) to one end of the pipe.
2. Insert the MicroPoint cables through both end caps with strain reliefs.
3. Terminate the MicroPoint cables to the terminal strips labeled TBI and TB2 and apply the dielectric grease as described in the MicroPoint II manual, Chapter 5. Make sure there is enough cable for the 6 foot (1.8m) drip loop.
4. Slide the CTU II circuit board into the pipe and tighten one strain relief on the cable. Test with UIST II software to ensure that no cable fault exists.
5. Attach the other end cap with ABS cement (not supplied). Tighten strain relief.
6. Prepare the potting compound. Turn the pipe upright and fill with the potting compound. Tilt the pipe left and right to evenly distribute the potting compound around the CTU II circuit board.
7. Attach the CTU II horizontally to the fence fabric with the supplied large cable ties.
8. Attach the MicroPoint cables to the fence with drip loops.

**Note: The units MUST be mounted horizontally on the fence.**