

# **Outdoor FieldCord Application Guide**

The Outdoor FieldCord Connector is an innovative solution intended to connect any device requiring small form factor RJ45 plugs. Its unique metal housing provides a waterproof seal and preserves continuous shielding across the connection. The shielded CMX-rated cabling ensures it will perform in harsh environments. The Outdoor FieldCord provides the best installation experience in various applications and locations.

- A waterproof seal and CMX outdoor rated cables reduce the need of conduit.
- Eliminates the need to terminate multi-piece plugs. The low-profile RJ45 plug comes pre-terminated.
- · Performs in tight spaces where a larger form factor field terminable plug may not fit.

#### **Security Cameras**

Security cameras are used to monitor safety in essential areas such as banks, parking structures, retail stores, schools, warehouses, and commercial buildings. Newer cameras have small form factors for connectivity, making it challenging to use field terminable plugs without exceeding a cable bend radius. The Outdoor FieldCord solves this problem by utilizing a small-form factor plug and flexible cabling to provide connectivity to all types of devices, especially in tight spaces.

### **Wireless Access Points**

Some Wireless Access Points (WAPs) provide WiFi coverage for extended range outside of buildings and are housed within NEMA enclosures, while others do not require an enclosure and are exposed directly to the elements. Often, WAPs are elevated on a pole or mounted to an exterior wall. These practices are well documented throughout various industries such as commercial spaces, hospitality, university campuses, or sporting venues.

### **Indoor/Outdoor Transitions**

The Outdoor FieldCord Splice Connector is designed to be used when transitioning from indoor cable to outdoor cable. The Outdoor FieldCord may run to external enclosures, cameras, lights, or other ethernet-connected devices requiring such a transition.

### **Outdoor PoE Lighting**

Outdoor lighting may be deployed in parking lots, neighborhoods, hospitals, schools, government buildings and a host of commercial buildings. It is becoming more and more popular to power and control this lighting via Power over Ethernet (PoE). PoE lighting, powered and controlled by the network, can be made smart by integrating with sensors, timed automation, and dimming functions based on movement or ambient lighting conditions.









### **Installation Considerations**

The Panduit Certification Plus System Warranty is a standards-based, performance warranty that covers copper and fiber cable and connectivity hardware components used in Panduit-certified structured cabling systems. Installation compliance with manufacturer guidelines and local codes is required. When exposed to the elements, the RJ45 plug component of the FieldCord must maintain a minimum IP65 protection from a device or enclosure. Mixing UTP and STP cable within the same infrastructure is not recommended.

## **Ordering Information**

Part Number	Description
FC-OCCO1MBL	Shielded / Outdoor Connector Cord, 6A Shielded CMX RJ45 Cord, 1M, Black
FC-OCCO3MBL	Shielded / Outdoor Connector Cord, 6A Shielded CMX RJ45 Cord, 3M, Black
FC-OCC/O5MBL	Shielded / Outdoor Connector Cord, w/ Loose 6A Shielded CMX RJ45 Cord, 5M, Black
FC-OSC	Shielded / Outdoor Splice Connector, Cat 6A

### **Frequently Asked Questions**

## Can I use the Outdoor FieldCord Splice Connector with unshielded bulk cable?

The Outdoor FieldCord Splice Connector can be used with any 4-pair, 22–26 AWG cable with a maximum insulation diameter of 0.06 inches and an overall cable OD of 0.24 inches to 0.323 inches with a round jacket profile. Panduit recommends either a fully unshielded or shielded channel, not mixing and matching shielded and unshielded cable and components.

## Can the Outdoor FieldCord maintain an IP rating when used with any cable?

An IP65 seal can only be guaranteed using the Panduit bulk cable part numbers: PFP6C04BL04-UG, PUO6AS04BL-G, and PUFR6X04BU-UG. Other cable types may work however, an IP65 seal cannot be guaranteed. Factors that may impact the seal from other cables include differing rates of expansion and contraction in extreme temperatures and overall diameter of the cable.

#### How will the Outdoor FieldCord perform when exposed to outdoor environments, such as UV from the sun, rainwater, or submerged or buried underground?

The Outdoor FieldCord is not designed for underground burial. It is CMX outdoor rated, offering UV and sunlight resistance, and is intended for rain exposure, but not underwater submergence. Use cable routing and management to avoid running it in standing water.

## What conduit or cable routing should I use with the Outdoor FieldCord in harsh environments?

Use any conduit that is rated for harsh environments. Make bulk cable selections based on harsh environment ratings. Remember to consider the Diameter of Jacket (DOJ) and Diameter of Dielectric (DOD). The Outdoor FieldCord metal connector assembly has a diameter of 0.94 inches and a length of 1.91 inches, so give special consideration if the connector is routed through conduit and around bends. The minimum size supported for a single assembly is a 1-inch internal diameter conduit.

## Can the Outdoor FieldCord Connector be used to transition between indoor and outdoor environments?

The metal connector assembly of the Outdoor FieldCord assembly could be used as a transition point so long as both cables meet the previously stated installation requirements and recommendations.

#### Are any special tools required to terminate the Outdoor FieldCord?

The Outdoor FieldCord does not require any special tools to terminate. The TG-Style splice connector can be securely sealed through the simple screw-together assembly and re-terminated up to 20 times.

## If the FieldCord is in a system struck by lightning, will it provide protection to the components it is connected to?

No. The FieldCord is a component within the channel and does not provide any type of surge or lightning protection beyond standard cable shielding. Consider an appropriate UL-rated solution at the device end if surge or lightning protection is required. Refer to the device manufacturer recommendations.

#### How can I test the Outdoor FieldCord?

Testing Instructions are under the part number on www.panduit.com. Testing is conducted per ANSI/TIA-568D.2 to channel or permanent link or ISO 11801Class  $E_{a}$  Ch AMD1.

#### How is the Outdoor FieldCord covered under warranty?

The Outdoor FieldCord is covered under the Panduit one-year limited product warranty, which is available for review at **www.panduit.com/warranty**. Suppose the FieldCord is installed as part of a connectivity solution that meets the requirements of the Panduit Certification Plus System Warranty. In that case, the terms of which are available at **www.panduit.com/certification-plus-system-warranty**, the FieldCord may be warranted for up to 25 years.

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#### www.panduit.com/fieldcord