![ITEM srl logo with Università degli Studi Firenze logo]

Integrated Technologies for Environmental Monitoring

Prs0025f Field Case Installation

Operator's guide

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Introduction

The Prs0025 Field Case it's part of the FIBRA optic array, a versatile acquisition system specifically designed for infrasound arrays. The box is designed and build to make the installation of the infrasound sensor easy and reliable, and can be self-powered using a solar panel instead of the 15V DC supply.
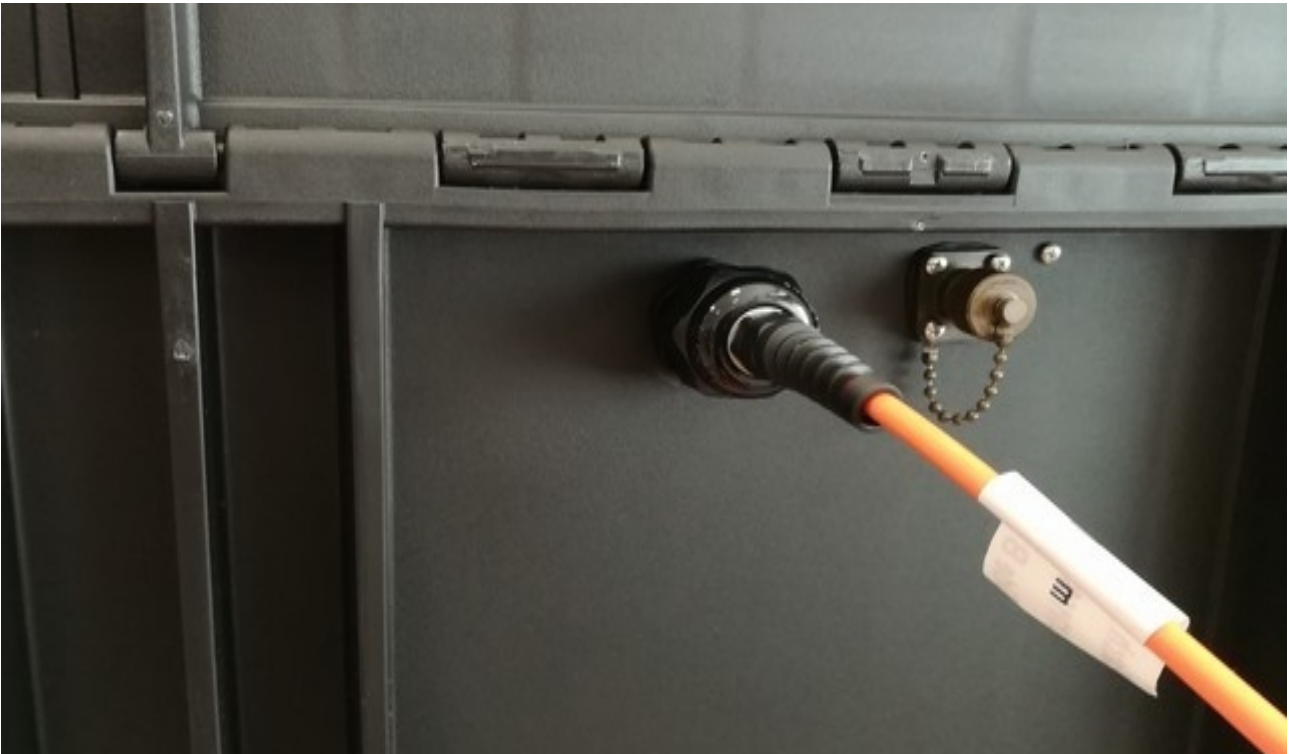
Installing the Field Case

1) Connect the fiber optic cable

In the rear of the box U can find the fiber cable gland and the MIL power supply connector (Figure 1)

Figure 1. External connectors on the rear of the box.

Insert the fiber cable inside the box through the cable gland and tight the gland on the aluminium terminal (Figure 2).

Figure 2. Fiber cable gland.

Connect the fiber cable on the top of the Prs0025 sensor via the fiber optic adapters mounted on the panel connectors (Figure 3).

Figure3. Fiber cable connection.

A clean fiber optic connection is critical for the correct system operation. Accordingly, keep the connector cups closed when ports are not in use.

2) Wind noise reduction system

Connect the n°4 hose tubes on the sides of the box (Figure 4).

Figure 4. Hose quick connector.

3) Connect the battery

Connect the battery connection cable terminal RED to the positive pole of the battery and the BLACK cable terminal to the negative pole (Figure 5).

Figure 5. Battery cables connection.

4) Power supply

In the rear of the box U can find the MIL connector for the power supply (Figure 1). It's possible connect a solar panel or a 15V DC (15-40 Volts accepted).

Panel Connector:

Cable Connector:

Pin	Description
A	Power +15 V
B	Power GND
C	

Fastening the power cable connector to the panel connector (Figure 6).

Figure 6. Power supply connection.

This operator's guide it only covers the installation of the Prs0025 Field Case, in order to operate the FIBRA array it's necessary read the FIBRA Manual.