

FieldCast Fiber Dock System One

control, monitor, and power your PTZ camera
over one fiber optic cable



FieldCast

the fiber optic system

www.fieldcast.eu

CONTENT

Fiber Dock System One Turnkey fiber system for PTZ cameras	page 3
Fiber Dock One Four channel multi converter box	page 6
2Core Hybrid Cable Robust fiber optic and DC power cable	page 9
PTZ Monk Single channel converter box	page 11

FIBER DOCK SYSTEM ONE

Turnkey Fiber System for PTZ Cameras

Want to use PTZ cameras in the field or in the studio and control over longer distances with a minimum of robust cabling and without compromising on image quality? Then FieldCast Fiber Dock System One might be the smart solution for your live events production; DC power, audiovisual signals, and camera control data, all over one fiber optic cable per camera. The solution simply acts as an Ethernet network, so you can use any Ethernet based combination of PTZ controller and camera!

OVERVIEW

FieldCast Fiber Dock System One is a compact turnkey solution for four 3G SDI PTZ camera systems with Ethernet control.

It provides you all the necessary products to have your PTZ cameras controlled and monitored over fiber. The system is mobile and flexible, and comes with lightweight fiber optic cables suitable for the world of small PTZ cameras.



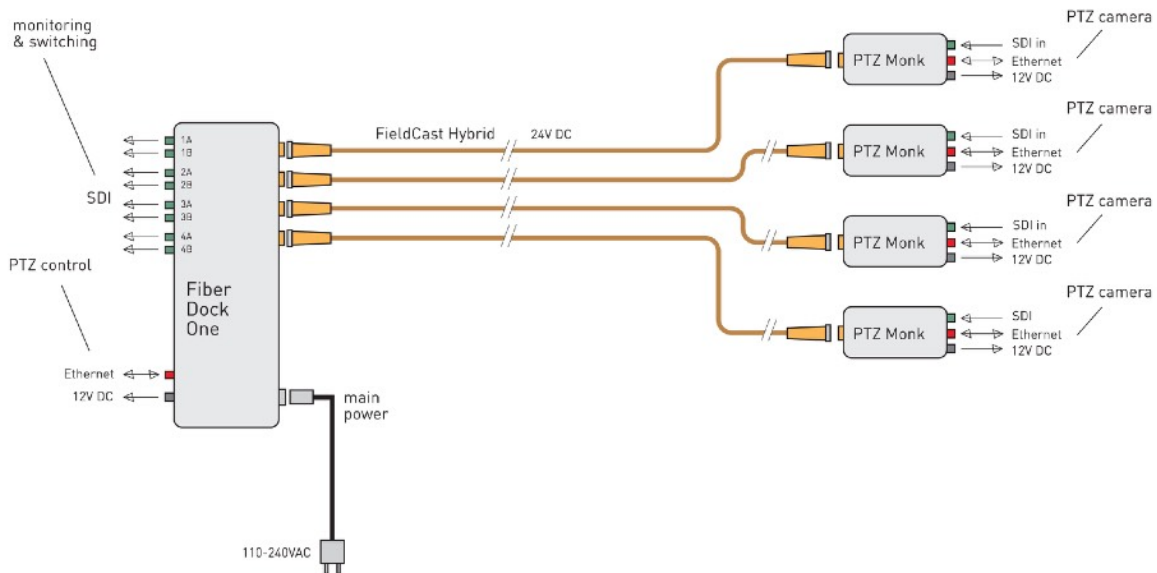
The turnkey system contains the following components:

- FieldCast Fiber Dock One (1 piece)
- 100m/328ft FieldCast 2Core SM Hybrid on drum (4 pieces for 4 PTZ cameras)
- FieldCast PTZ Monk (4 pieces for 4 PTZ cameras)

The components are also available as separate standalone products so depending on how many PTZ cameras you have, you can lower the number of hybrid cables and PTZ Monks.

HOW DOES IT WORK?

The basic concept behind the system is simple: collect all signals from one PTZ camera with FieldCast PTZ Monk, transport it over one cable with FieldCast 2Core SM Hybrid on drum, and create an overview and control spot at the other end of the cable with FieldCast Fiber Dock One.



- Fiber Dock One has 4 SDI channels with dual output, for monitoring and connection to switcher
- Fiber Dock One powers all 4 PTZ Monk units over hybrid cable
- PTZ Monk has SDI input, Ethernet for control and 12VDC output for powering the PTZ camera
- Ethernet connection on Fiber Dock One enables full PTZ control of all 4 PTZ cameras

FieldCast Fiber Dock One is the central part of this turnkey solution. Functioning as a central hub, it receives and sends signals from and to four PTZ cameras, using four **FieldCast 2Core SM Hybrid Main Cables**. Fiber Dock One brings you four channels of 3G SDI output so you can connect straight to your switcher or monitor. You can connect your PTZ controller directly to the Ethernet i/o port of Fiber Dock One, and it will act as a standard Ethernet switch between your controller and your cameras, but now over fiber. Furthermore, Fiber Dock One features a four channel 24VDC power supply to power all four cameras over the FieldCast hybrid cable.

And here it comes all together. For every channel, Fiber Dock One connects to FieldCast hybrid cable, and this light and robust cable contains two strands of fiber for data transport and two copper conductors for power transmission. Just imagine, each camera only needs one flexible cable to transmit uncompressed SDI video, control data, and power!

At the other end of each hybrid cable you only need to attach **FieldCast PTZ Monk**, a one channel fiber optic converter with 3G SDI input, Ethernet i/o and 12VDC output. Once your PTZ camera is connected to FieldCast PTZ Monk, it can start up, it will listen to the PTZ controller you connected to FieldCast Fiber Dock One, and a video signal will neatly show up at one of the Dock's four SDI monitor outputs.

FIBER DOCK ONE

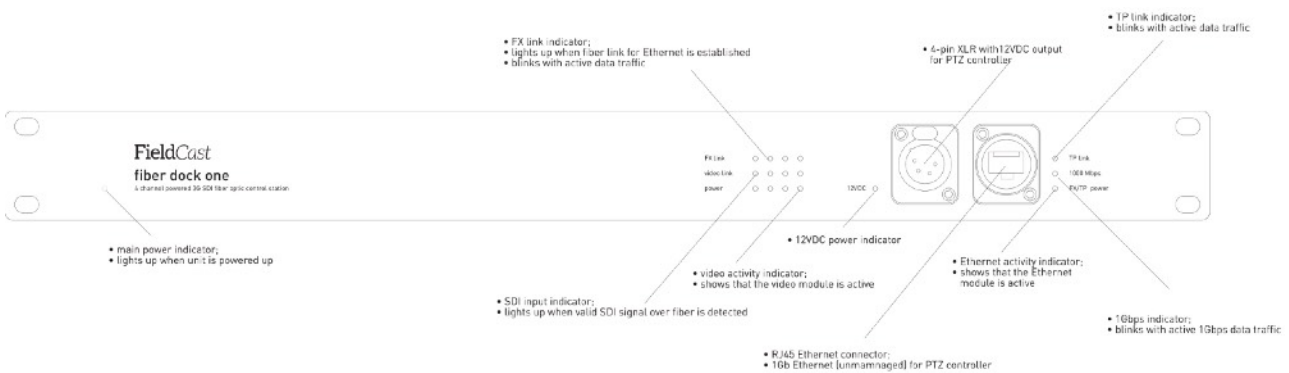
Four Channel Multi Converter Box



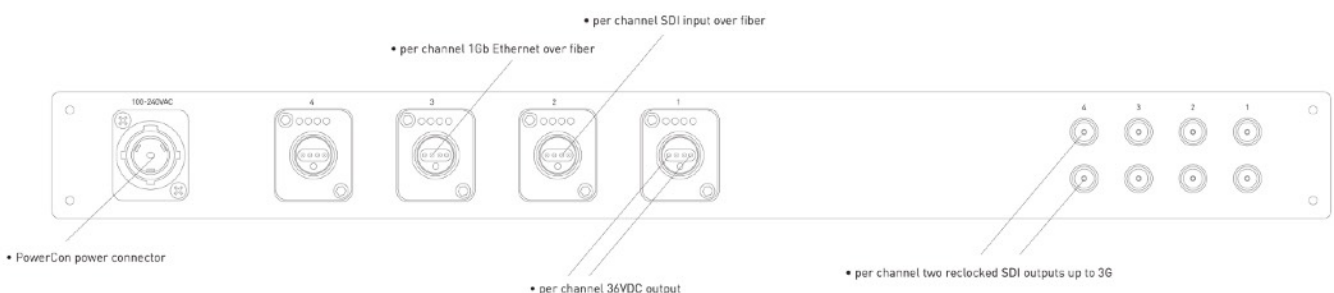
FEATURES FIBER DOCK ONE

Fiber Dock One comes with a power cable to be plugged in the 110/220V AC power input of the unit. Inside, A/C power is converted to 24VDC power so it can output low voltage power over fiber optic cable to power up PTZ controllers, FieldCast PTZ Monks, and PTZ cameras.

The front side contains 1 Ethernet i/o port to connect to a PTZ controller or Ethernet hub. You don't need to power the PTZ controller with its own power supply. You can have Fiber Dock One supply the power for your PTZ controller. Just use the XLR connection at the backside of Fiber Dock One and connect to the DC In of your PTZ controller. Now the PTZ controller is powered by Fiber Dock One.



At the backside, Fiber Dock One houses 4 FieldCast Hybrid Chassis Connectors to connect to 4 FieldCast Hybrid Main Cables. Each chassis connector contains two strands of fiber for data transport and two copper conductors for power transmission. Over fiber, each connector receives uncompressed SDI video from a PTZ camera and carries Ethernet (camera control data) i/o. Over the copper conductors, each chassis connector delivers 24VDC power output to power up a FieldCast PTZ Monk and a PTZ camera. Just imagine, each camera only needs one flexible cable to transmit uncompressed SDI video, control data, and power!



The backside of Fiber Dock One also houses 4 channels of 3G SDI out, with dual SDI output per channel. So per channel, you can connect for instance to your switcher and uses the dual output to locally monitor the SDI video generated by the PTZ camera.

SPECS FIBER DOCK ONE

- Dimension 1RU 19 inch box. Dimension (width x depth x height): 44 x 20 x 4.36 cm
- 110-220V A/C power input
- 1x Ethernet i/o port
- 1x XLR for 12VDC power out
- 4x FieldCast Hybrid Chassis Connectors each carrying SDI-in video over fiber, Ethernet i/o over fiber, and 24VDC power out
- 4x 3G SDI out, with dual SDI output per channel

2CORE HYBRID CABLE

Robust Fiber Optic and DC Power Cable



FEATURES 2CORE HYBRID CABLE

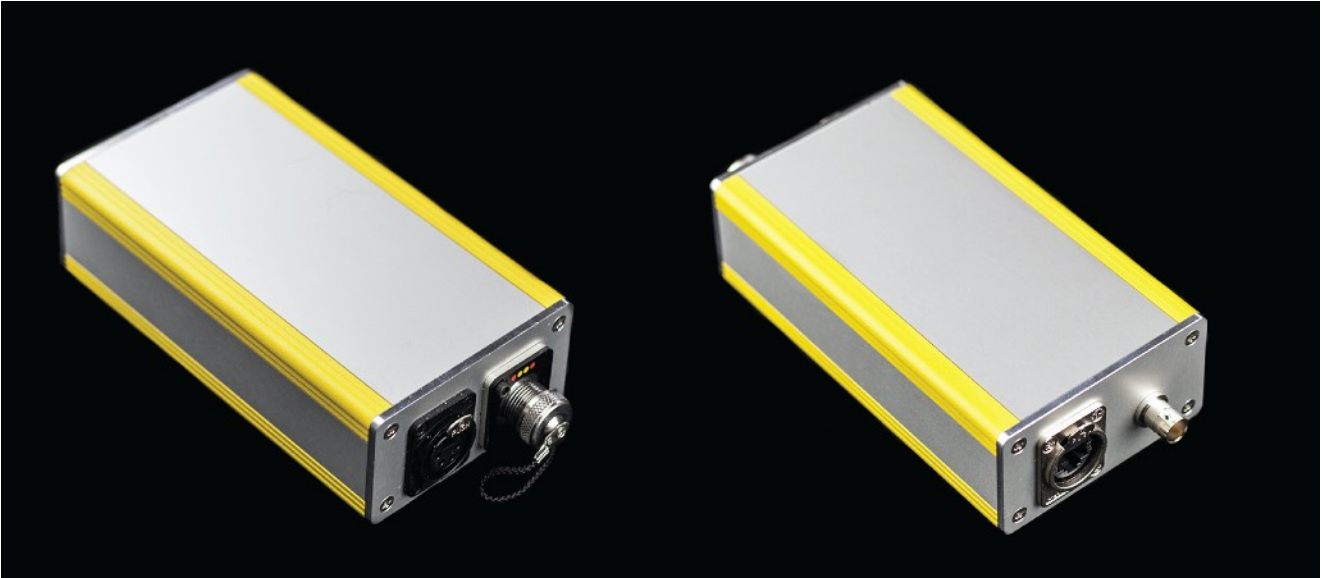
FieldCast 2Core Hybrid Main Cable is 100 meter of flexible fiber optic cable containing two strands of fiber and two copper wires. The lightweight cable adds low voltage DC power to fiber and brings it into the field. Now you can power your converter, camera or other equipment over the cable.

SPECS 2CORE HYBRID CABLE

- Two cores of protected fiber
- Copper cable for power connection
- Single Mode 9/125
- Outer cable diameter 7.2 mm.
- Color coded: two yellow rings for 2Core single mode and two red rings for power
- Cable length 100 meters / 328ft in total
- Robust male cable connector on both sides
- Wound on Schill GT310 drum

PTZ MONK

Single Channel Converter Box



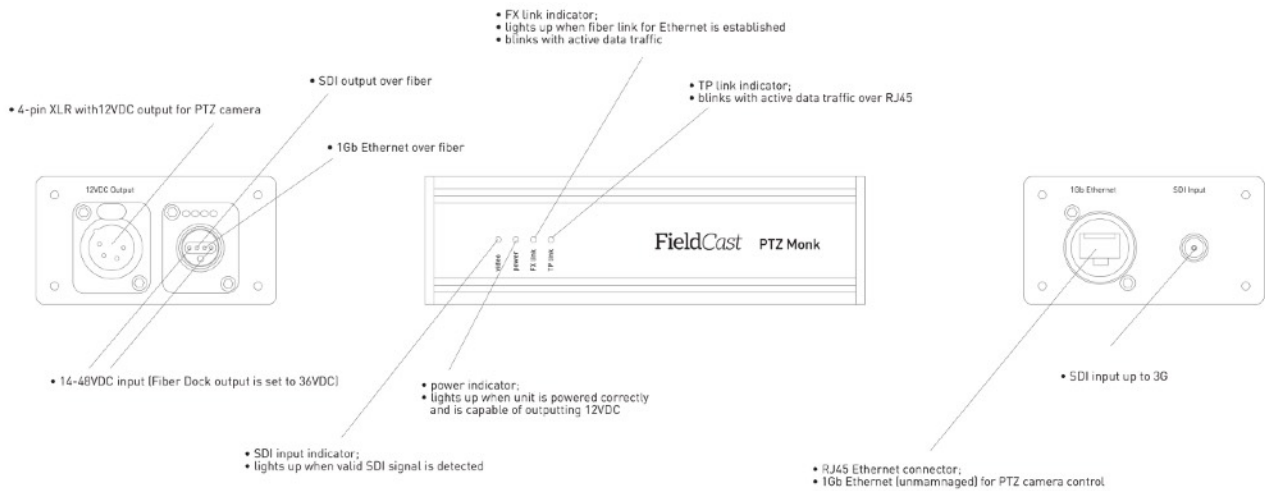
FEATURES PTZ MONK

FieldCast PTZ Monk is a small one channel fiber optic converter designed for 3G SDI PTZ camera systems with Ethernet control.

PTZ Monk converts the 3G SDI video output of the PTZ camera to fiber and acts as a fiber media converter for the Ethernet control data.

When you connect a FieldCast hybrid cable coming from FieldCast Fiber Dock to the hybrid connector of PTZ Monk, it receives 24VDC at the input and converts it to a stable 12VDC at the XLR 4-pin output to feed the camera.

At the same time, the built-in media converter taps into the fiber optic Ethernet switch of Fiber Dock and the Ethernet i/o port on PTZ Monk becomes part of the network.



And lastly, the 3G SDI input on PTZ Monk is converted to fiber, and the signal will find its way to Fiber Dock.

PTZ Monk has separate standard connectors for power, SDI and Ethernet, and patches easily to a PTZ camera.

SPECS PTZ MONK

- One channel 3G SDI to fiber converter
- 1Gbit Ethernet to fiber converter
- 1x hybrid chassis connector carrying 24V DC input from FieldCast Fiber Dock One, SDI-in video over fiber, and Ethernet i/o over fiber
- 1x SDI input connector
- 1x Ethernet i/o connector
- 12VDC power out XLR connector