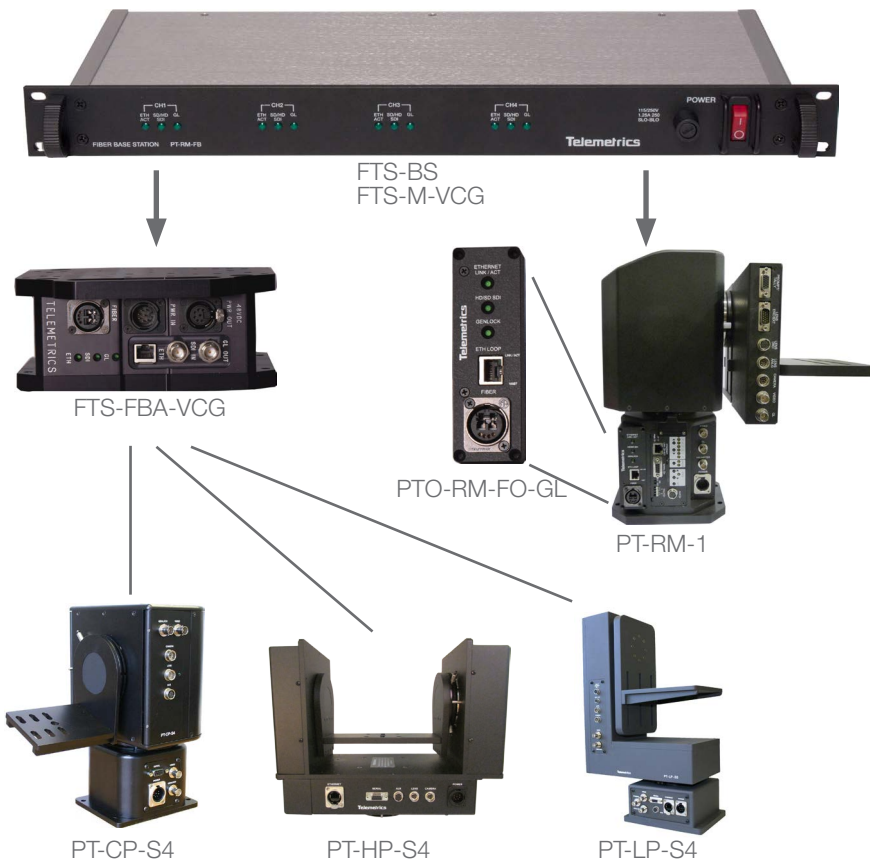




Pan/Tilt Fiber System - FTS-BS, FTS-FBA-VCG



Features:

- » Provides optical link to robotics P/T heads
- » Provides power to P/T head over opticalCON DUO hybrid cable
- » Transports Ethernet control, 3G/HD/SD SDI camera video and Genlock over duplex single-mode fiber optic cable
- » Supports SDI data rates from 143 Mb/s to 2.97 Gb/s – auto-selectable
- » Supports SD bi-level and HD tri-level Genlock
- » Operating Distance: 1km

The Pan/Tilt Fiber System provides fiber connectivity to robotics Pan/Tilt heads such as PT-RM-1, PT-CP-S4, PT-HP-S4, and PT-LP-S4. The system supports Ethernet control, HD/SD SDI video, and Genlock functions via duplex single-mode fiber optic cable. One of the fibers is used for Ethernet, and the other for video/genlock transmission. Wave Division Multiplexing is used to separate the signals. Various fiber optic cables terminated with LC connectors can be used, depending on specific customer requirements. For demanding applications where a reliable, ruggedized and dirt protected connection is required, opticalCON cables from Neutrik can be used. The cables feature rugged, all metal heavy duty connectors with reliable push-pull locking mechanisms. In addition to being much more flexible, lighter and cost effective than SMPTE 311M cables, the opticalCON low voltage hybrid cable can deliver up to 290W of power to the Pan/Tilt head.

The Pan/Tilt Fiber system consists of the following system components:

- Fiber Base Station
- Fiber Base Station Module
- Plug-in Fiber Module for PT-RM-1 Pan/Tilt Head
- Fiber Adapter for PT-CP-S4, PT-HP-S4, and PT-LP-S4 Pan/Tilt Heads

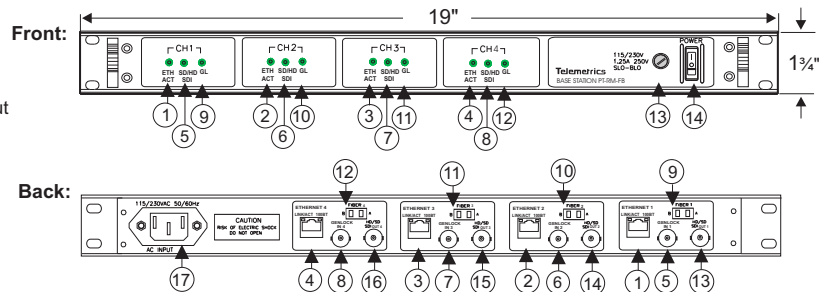
The Fiber Base Station is a rack-mountable unit, which occupies one rack unit space and can house four Fiber Modules. Each Fiber Module provides connectivity to one Pan/Tilt head. Thus one FTS-BS Fiber Base Station can serve up to four Pan/Tilt heads.



Pan/Tilt Fiber System - FTS-BS, FTS-FBA-VCG

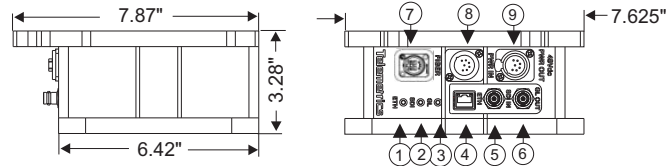
FTS-BS PT-RM Fiber Base Station

- | | |
|------------------------|-------------------------------|
| Front: | Back: |
| 1-4 "ETH ACT" LED | 1-4 "Ethernet" In/Out |
| 5-8 "HD/SD SDI" LED | 5-8 "GL" Genlock Input |
| 9-12 "GL" LED | 9-12 "Fiber" LC Duplex In/Out |
| 13 Fuse holder | 13-16 "HD/SD SDI" Output |
| 14 Power ON/OFF switch | 17 AC Power Receptacle |



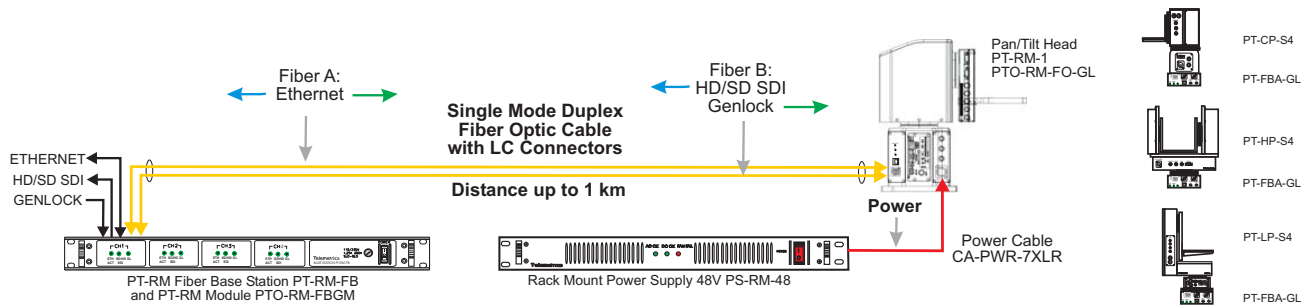
FTS-FBA-VCG Pan/Tilt Head Fiber Adapter

- | | |
|-----------------------|----------------------|
| 1 "ETH ACT" LED | 7 Fiber OpticalCON |
| 2 "HD/SD SDI" LED | 8 "POWER IN" Input |
| 3 "GL" LED | 9 "POWER OUT" Output |
| 4 "Ethernet" In/Out | |
| 5 "HD/SD SDI" Input | |
| 6 "GL" Genlock Output | |

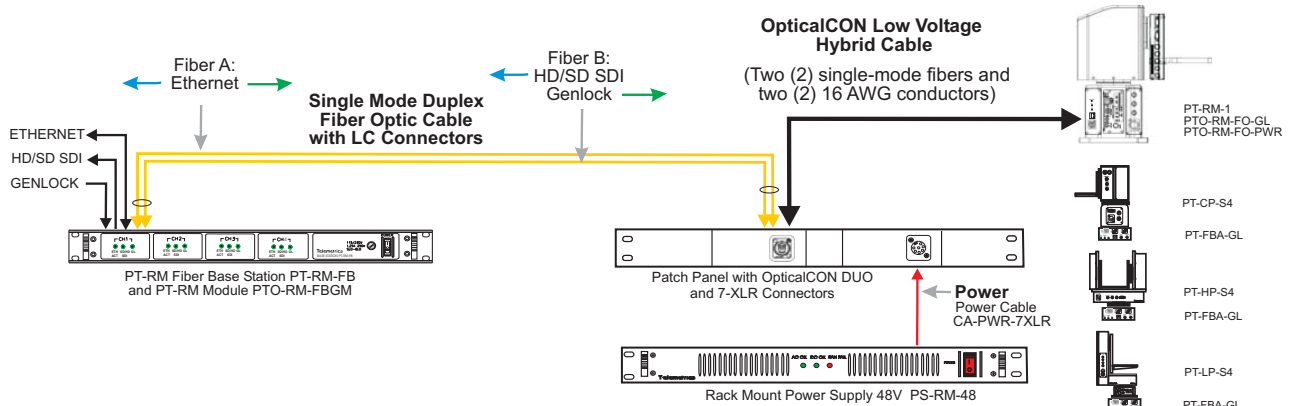


Dimensions in inches

Fiber Option Hook-up Diagram using Duplex Fiber Optic Cable with LC Connectors



Fiber Option Hook-up Diagram using OpticalCON Low Voltage Hybrid Cable





Pan/Tilt Fiber System - FTS-BS, FTS-FBA-VCG

Cable Distance Capability using OpticalCON Low Voltage Hybrid Cable

Cable Length [feet/m]	Neutrik P/N <i>Joseph El. P/N</i>	Max Delivered Power [W]	Typical System Configuration	Notes
50'/15m	NK02SA-S5-R-0-15 <i>CAJLVH-NOSP-NOSP-50</i>	290*	P/T+Telev+Cam+Telepr	Any Camera+Teleprompter
100'/30m	NK02SA-S5-R-0-30 <i>CAJLVH-NOSP-NOSP-100</i>	290*	P/T+Telev+Cam+Telepr	Any Camera+Teleprompter
150'/45m	NK02SA-S5-R-0-45 <i>CAJLVH-NOSP-NOSP-150</i>	290*	P/T+Telev+Cam+Telepr	Any Camera+Teleprompter
200'/61m	NK02SA-S5-R-0-61 <i>CAJLVH-NOSP-NOSP-200</i>	225*	P/T+Telev+Cam+Telepr	Cam+Telepr Power <=100W
250'/76m	NK02SA-S5-R-0-76 <i>CAJLVH-NOSP-NOSP-250</i>	180	P/T+Cam+Telepr	Any Camera
300'/91m	NK02SA-S5-R-0-91 <i>CAJLVH-NOSP-NOSP-300</i>	150	P/T+Cam+Telepr	Cam Power <=25W
350'/106m	NK02SA-S5-R-0-106 <i>CAJLVH-NOSP-NOSP-350</i>	128	P/T+Camera	Any Camera
400'/122m	NK02SA-S5-R-0-122 <i>CAJLVH-NOSP-NOSP-50</i> <i>CAJLVH-NOSP-NOSP-400</i>	112	P/T+Camera	Any Camera
450'/137m	NK02SA-S5-R-0-137 <i>CAJLVH-NOSP-NOSP-450</i>	100	P/T+Camera	Any Camera
500'/152m	NK02SA-S5-R-0-152 <i>CAJLVH-NOSP-NOSP-500</i>	90	P/T+Camera	Cam Power <=40W
550'/167m	NK02SA-S5-R-0-167 <i>CAJLVH-NOSP-NOSP-550</i>	82	P/T+Camera	Cam Power <=32W
600'/183m	NK02SA-S5-R-0-183 <i>CAJLVH-NOSP-NOSP-600</i>	75	P/T+Camera	Cam Power <=25W
650'/198m	NK02SA-S5-R-0-198 <i>CAJLVH-NOSP-NOSP-650</i>	70	P/T+Camera	Cam Power <=20W

* Requires PS-RM-48-2 option

Fiber Adapter Cables to PT-HP-S4

CA-RJ45-018	Cable RJ-45 for Ethernet 18"
CA-BNC-BNC-030	Cable BNC Male/Male 30"
CA-PWR-7XLR-002	Cable 48V PS M7XLR 2'

Fiber Adapter Cables to PT-CP-S4

CA-RJ45-012	Cable RJ-45 for Ethernet 12"
CA-BNC-BNC-018	Cable BNC Male/Male 18"
CA-PWR-7XLR-0.5	Cable 48V PS M7XLR/FM7XLR 0.5'

Fiber Adapter Cables to PT-LP-S4

CA-RJ45-012	Cable RJ-45 for Ethernet 12"
CA-BNC-BNC-018	Cable BNC Male/Male 18"
CA-PWR-7XLR-0.5	Cable 48V PS M7XLR/FM7XLR 0.5'

Specifications

Ethernet Standards	Copper: 100 Base-TX Fiber: 100 Base-FX
Video Standards (auto-selectable)	SD SDI: SMPTE 259M 270 Mb/s HD SDI: SMPTE 292M 1.5 Gb/s 3G SDI: SMPTE 424M 3.0 Gb/s
Genlock	SD Sync: NTSC or PAL black burst bi-level, 300 mV HD Sync: SMPTE 274 M, 296 M tri-level, 600 mV p-p
Operating Distance	1 km over 9/125 μm single-mode optical fiber
Weight	6.5 lbs (FTS-FBA-VCG)

Specifications and features subject to change without notice

Ordering Information

PT-RM Fiber Base Station*	FTS-BS
PT-RM Fiber BS Module**	FTS-M-VCG
PT-RM-1 Fiber Option	PTO-RM-FO-GL
Pan/Tilt Head Fiber Adapter	FTS-FBA-VCG
Opticon Cable Duo Chassis***	OCON-PP-X-NOSB-ST1
Opticon Cable Fiber Single Mode	GCFAZTLS-02
Opticon Cable Power	CA-PWR-OCON-3

* Fiber module not included

** Order one module per camera

***X represents quantity per box (up to 4 per box set)

Telemetrics
Camera Control Systems