



CABLE TV on fiber

- Long Distances without loss
- Prevent Ground Loops
- Lightning Protection

CABLE TV FIBERLINK Pass 100+ TV channels on 1 SingleMode fiber with no need for amps

- Combine dozens of analog and digital channels in 50 to 870 Mhz band, and pass combined channels over one SM fiber for up to 50 miles.
- Trouble-free operation with no amplifiers to adjust (unlike coaxial cable systems that use amps, which need regular adjustment).
- Split the optical output from TX unit, and run fiber to RX units located in far corners of the building. Feed dozens of TV's in each viewing location.

CATVfiber

Cable TV signals over long distances without loss

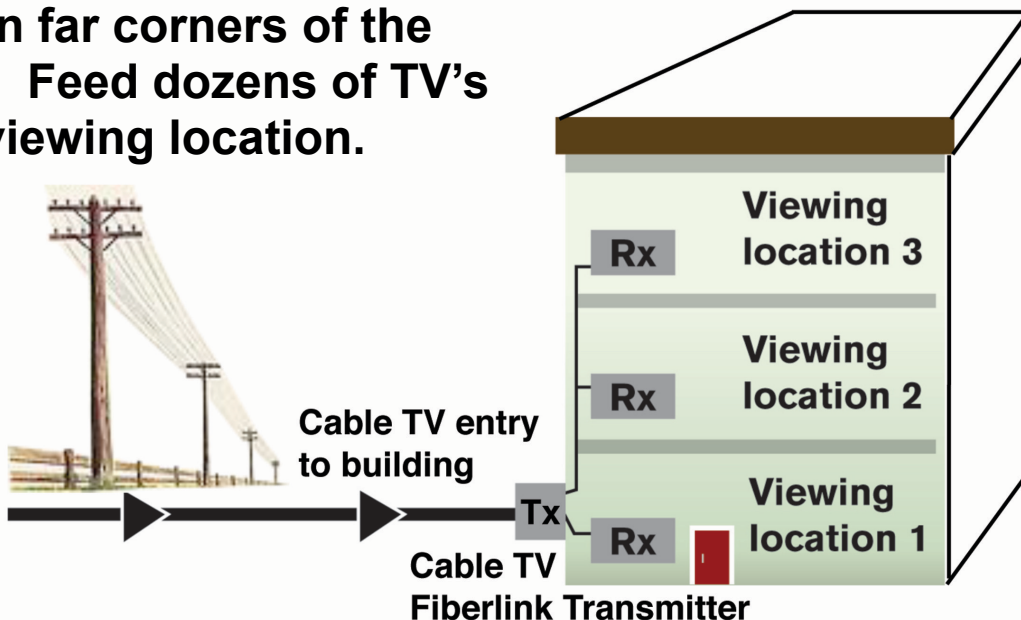
Fiber Optic TRANSMITTER

Cable TV input on 'F' connector
Optical output on SC/APC connector



Fiber Optic RECEIVER

Optical input on SC/APC connector
Cable TV output on 'F' connector





CATVfiber TRANSMITTER Specs

Cable TV signals over long distances without loss



1. RF Performance

	LIMITS
Frequency Range	
Connector	F-connector, female
Impedance	75 ohm
Input Return Loss	> 15 dB
Input RF Level	+15 to 20 dBmV
AGC Control Range	+ 5 dB
MGC Control Range	+ 5 dB
RF Frequency response (flatness)	+ 1 dB
Carrier-to-Noise Ratio	> 50 dBc*
Composite Second Order (CSO)	> 65 dBc*
Composite Triple Beat (CTB)	> 68 dBc*
Front Panel Test Port Level	-20 dB from Input

* Results based on 110 channel Matrix carrier input, fiber link, and -1 dBm optical receiver input level.

2. Optical Performance

	LIMITS
Wavelength	1310 nm.
Output Level (varies by model number)	6, 7, 8, 9, 10, 11, 12, 13, 14 dBm
Output Connector	SC/APC (FC/APC optional)
OMI	4%

3. General

	LIMITS
Input power	90 VAC to 264 VAC at 47 Hz to 63 Hz, 30 watt typ.
Power cord	NEMA 15P to IEC320 male on chassis
Fuse	5MF 500/250V (BEL) (spare in IEC320 socket)
Temperature Range	-10 to +50°C (+40°C max. recommended)
Relative Humidity (non-condensing)	0 to 95%
Altitude	0 to 15,000 ft
Weight	9.15 lb.
Size:	1 RU (1.75")H x 19"W x 13"D

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1. Receiver Optical Performance

SPECIFICATION	LIMITS
Wavelength	1290 to 1600 nm
Input Level	-6 to 2 dBm (0.25 to 1.6 mW)
Input Connector	SC/APC
Optical Return Loss	> 45 dB

2. Receiver RF Performance

SPECIFICATION	LIMITS
Frequency Range	53 to 1000 MHz
RF Frequency Response (Flatness)	± 0.5 dB
Output RF Level	> 25 dBmV @ -1dBm Optical Input
Composite Second Order (CSO)	<-65dBc*
Composite Triple Beat (CTB)	<-67dBc*
CNR	>51dB
Output Return Loss	> 16 dB typ. 53-860 MHz
Connector	F-Connector, Female
Impedance	75 ohm
RF Output Test Port Level	-20 dB ± 1 dB from Input

* Loaded with 78 Analog Channels, -1dBm Input

3. Reverse RF Performance

SPECIFICATION	LIMITS
RF Input Level	15 dBmV
Frequency Range	5 to 42 MHz
Frequency Response	< ± 0.5dB
Input Return Loss	> 16 dB (18 dB typ.)

4. Reverse Optical Performance

SPECIFICATION	LIMITS
Wavelength	1310 nm.
Output Level	0 dBm typ., - 3 to +3 dBm (0.5 to 2 mW)
Input Connector	SC/APC
Optical Return Loss	> 45 dB

5. General

SPECIFICATION	LIMITS
Input Power	12-15 Vdc, 350~400 mA watt typ.
Power Connections	1) Dedicated female F-connector for use with supplied AC adaptor 2) DC power extraction for female f-connector RF port for use with power on coax powering solution.
Temperature Range	-20 to +65°C on chassis base (+40°C max. recommended)
Relative Humidity (non-condensing)	0 to 95%
Altitude	0 to 15,000 ft
Weight	0.75 lb.
Size	4.4"H x 5.2"W x 1.35"D

CATVfiber RECEIVER Specs

Cable TV signals over long distances without loss

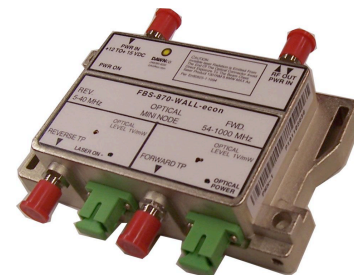




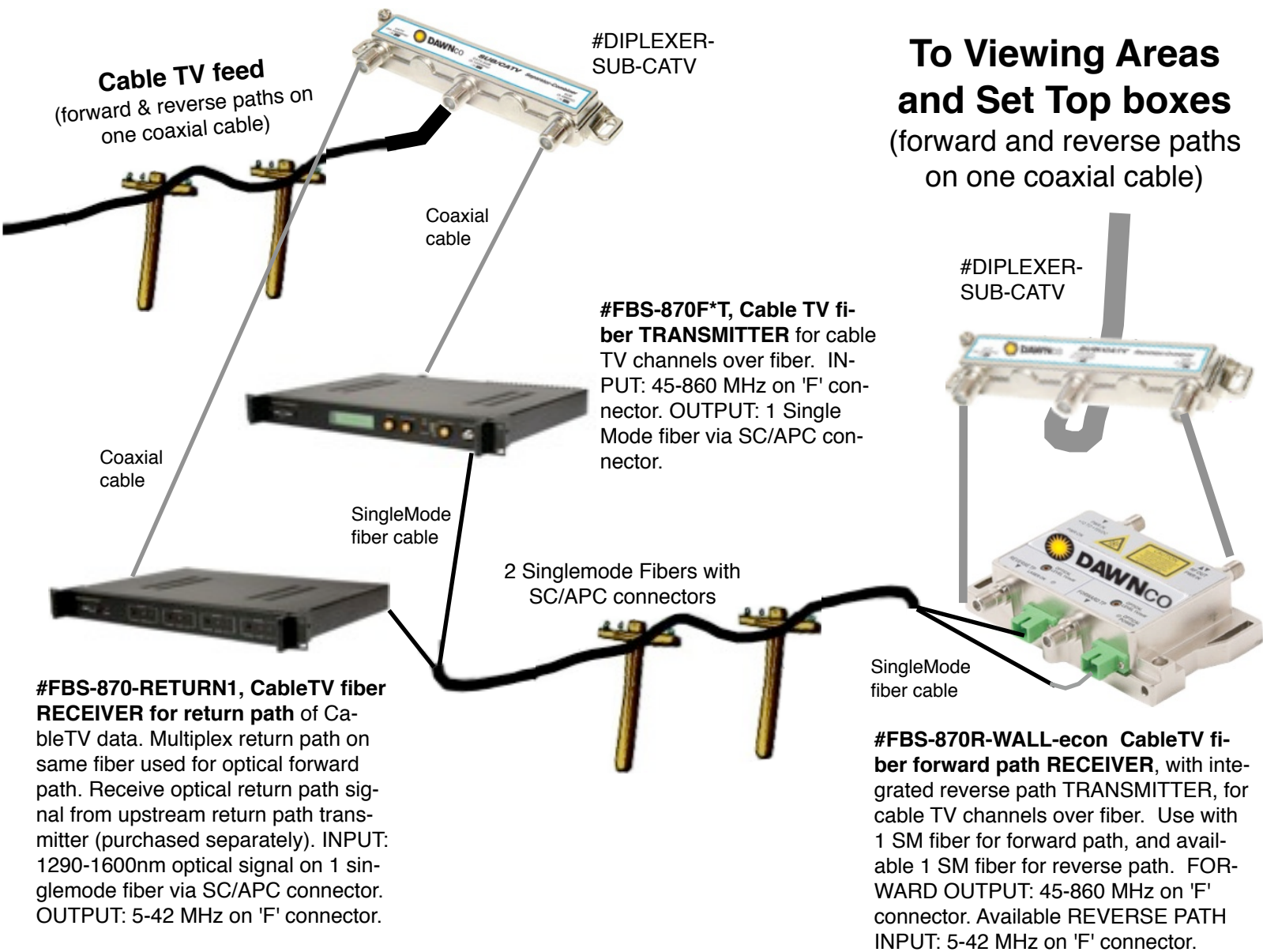
DIAGRAM showing CableTV Fiber Link

Use 2-Singlemode fibers for both forward and reverse path

Use 1-Singlemode fiber for forward path only

UPGRADE to 2-way Cable TV on fiber with reverse path

Use FIBER to pass CABLE TV signals over long distances, or to distribute TV channels within a facility without using amplifiers. No ground loop problems. No distance limitations. When you use fiber, you eliminate problems that are associated with copper cable. No way for lightning surge to pass over fiber. Fiber is simple, too. Choose the TX and RX for your needs, and DAWNco will provide the fiber cable length you need, with connectors factory installed, or you can hire a local fiber contractor to run fiber cable to your viewing locations. Call for more info.



To Viewing Areas and Set Top boxes (forward and reverse paths on one coaxial cable)

#FBS-870-RETURN1, CableTV fiber RECEIVER for return path of CableTV data. Multiplex return path on same fiber used for optical forward path. Receive optical return path signal from upstream return path transmitter (purchased separately). INPUT: 1290-1600nm optical signal on 1 singlemode fiber via SC/APC connector. OUTPUT: 5-42 MHz on 'F' connector.

#FBS-870F*T, Cable TV fiber TRANSMITTER for cable TV channels over fiber. INPUT: 45-860 MHz on 'F' connector. OUTPUT: 1 Single Mode fiber via SC/APC connector.

#FBS-870R-WALL-econ CableTV fiber forward path RECEIVER, with integrated reverse path TRANSMITTER, for cable TV channels over fiber. Use with 1 SM fiber for forward path, and available 1 SM fiber for reverse path. FORWARD OUTPUT: 45-860 MHz on 'F' connector. Available REVERSE PATH INPUT: 5-42 MHz on 'F' connector.



DIAGRAM showing CableTV Fiber Link

Use 2-Singlemode fibers for both forward and reverse path

Use 1-Singlemode fiber for forward path only

**Feed MANY VIEWING AREAS
without need for RF amps**

Use FIBER to pass CABLE TV signals over long distances, or to distribute TV channels within a facility without using amplifiers. No ground loop problems. No distance limitations. When you use fiber, you eliminate problems that are associated with copper cable. No way for lightning surge to pass over fiber. Fiber is simple, too. Choose the TX and RX for your needs, and DAWNco will provide the fiber cable length you need, with connectors factory installed, or you can hire a local fiber contractor to run fiber cable to your viewing locations. Call for more info.

