

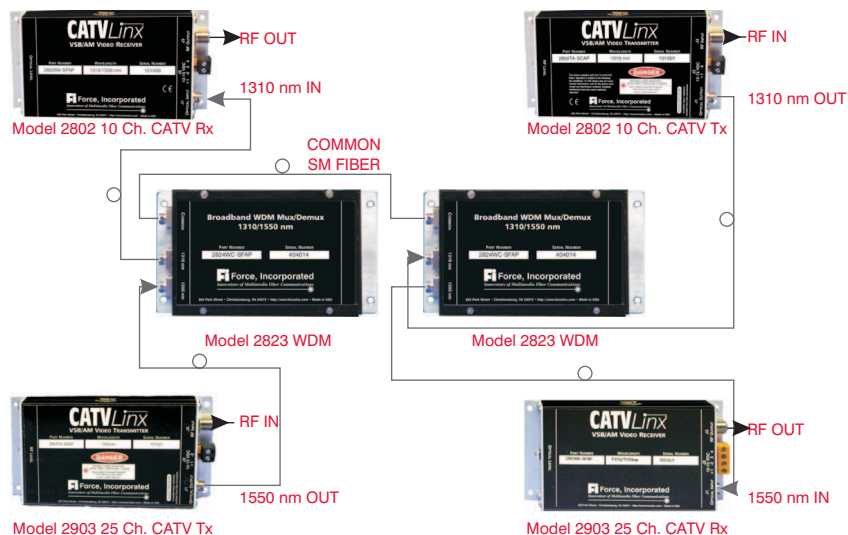
### WDM Transport

- Model 2823 offers high crosstalk rejection and low optical insertion loss.
- Allows the user to configure most standard single-mode Force, Inc. fiber optic data links.
- Accommodates two signals being sent in the same direction on one fiber.
- Excellent for use with DBS/ CATV systems.
- A wide operating temperature range makes the Model 2823 ideal for a variety of applications.



*Model 2823: Multiplexer/Demultiplexer*

The Force Model 2823 Wavelength-division Multiplexer (WDM) allows a single fiber to be used to simultaneously transmit two optical signals of different wavelengths. The WDM at the transmit end combines a 1310 nm signal and a 1550 nm signal for output onto a single fiber. The WDM at the receive end separates the two signals onto two output fibers with minimal crosstalk and low insertion loss. There are two basic models; the 2823 WC, which offers high levels of optical isolation, and the Model 2823WD, which offers ultra high levels of optical isolation. Over one fiber, the Model 2823 can transmit either dual unidirectional data or video, bidirectional data or video, or video and pan-tilt-zoom control.



# Specifications and Ordering Information

## Optical Characteristics\*

	Min	Typ	Max	Units
Insertion Loss per End (WC)		0.75	1.0	dB
Insertion Loss per End (WD)		1.1	1.3	dB
Insertion Loss Temp. Dependence		±0.2		dB
Isolation Crosstalk (WC)	30			dB
Isolation Crosstalk (WD)	45			dB
Directivity	55			dB
Polarization Dependency		0.1		dB
Operating Wavelength	1290	1310	1330	nm
Operating Wavelength	1530	1550	1570	nm

## Environmental Characteristics\*

	Min	Typ	Max	Units
Operating Temp. Range	-40		+75	°C
Storage Temperature Range	-40		+85	°C
Humidity (RH, non-condensing)	5		95	%

## Physical Characteristics

	Min	Typ	Max	Units
Weight		8.3		oz.
		235		g
Dimensions	5.75 x 3.16 x 0.78			in.
	146 x 80 x 20			mm



*Model 2823WC and 2823WD*

## WDM P/N

WDM Options	30 dB Isolation	45 dB Isolation
Mux/Demux, 1310/1550 nm, FC/PC Connector	2823WC-SFFC	2823WD-SFFC
Mux/Demux, 1310/1550 nm, SC/PC Connector	2823WC-SFSC	2823WD-SFSC
Mux/Demux, 1310/1550 nm, FC/APC Connector	2823WC-SFAP	2823WD-SFAP
Mux/Demux, 1310/1550 nm, ST Connector	2823WC-SFST	2823WD-SFST

## Chassis P/N

Chassis Options	Single Power Supply	Dual Power Supplies
3RU, 2-Pin Connectors	2981CA-NN	2981CB-NN
3RU, 5-Pin Connectors	2981CC-NN	2981CD-NN

\*System performance specifications indicated for use with 9/125  $\mu$ m single-mode fiber.  
See IOM2823 for complete performance specifications.



**FORCE**

OPTICAL BROADCAST SYSTEMS

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