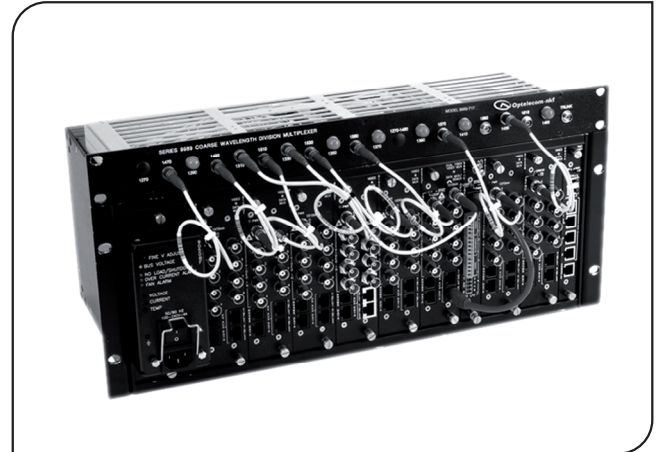


Features

- Preconfigured video transport systems for one fiber transmission of up to 128 channels
- Digital, uncompressed, high quality video ≥ 67 dBW SNR
- *SpectraStream* systems support simplex data in the same direction as the video
- *SpectraStreamPlus* systems support multiple duplex data channels
- 9900 Network Management System

SpectraStream™ and SpectraStreamPlus™



Description

These preconfigured, assembled, and tested *SpectraStream* systems utilize CWDM techniques to transport up to 128 channels of uncompressed live video on one fiber. By combining CWDM versions of our standard 9152D and 9252D 8-channel multiplexer and demultiplexer cards with CWDM optical components, systems transporting 16, 32, 48, 96, and 128 channels of video are available.

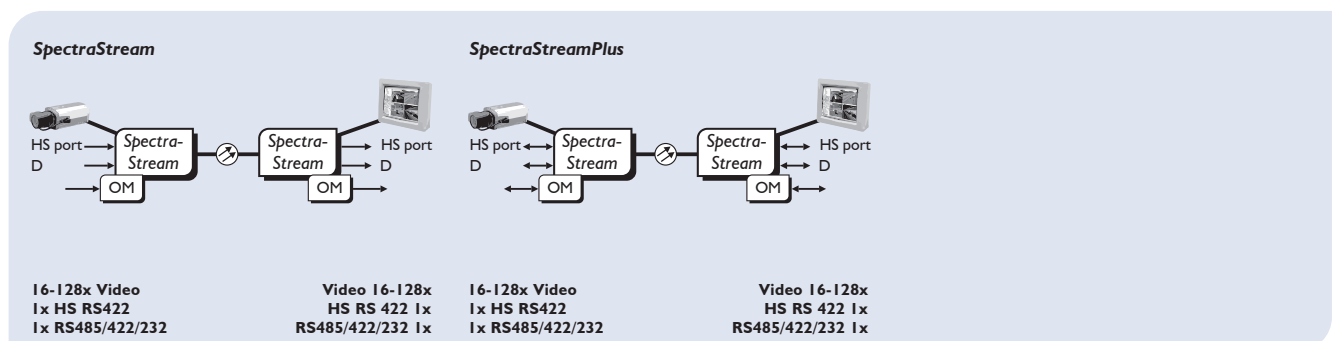
Option cards supporting additional data, audio, contact closure channels, and 10 or 100 Mb Ethernet on the same fiber are available. The system can be monitored via serial port, SNMP or Ethernet using the optional 9942A and 9900 NMS software package.

If a more specialized system is required, contact your sales representative or the factory for assistance in designing a custom system.

Ordering information

Models	Description	Fiber type	Wavelength	Distance	Housing
<i>SpectraStream</i> -16-FC	16 Channel Video Transmission System w/Simplex Data	SM	CWDM	42 km	19" rack
<i>SpectraStream</i> -32-FC	32 Channel Video Transmission System w/Simplex Data	SM	CWDM	44 km	19" rack
<i>SpectraStream</i> -48-FC	48 Channel Video Transmission System w/Simplex Data	SM	CWDM	44 km	19" rack
<i>SpectraStream</i> -64-FC	64 Channel Video Transmission System w/Simplex Data	SM	CWDM	44 km	19" rack
<i>SpectraStream</i> -96-FC	96 Channel Video Transmission System w/Simplex Data	SM	CWDM	44 km	19" rack
<i>SpectraStream</i> -128-FC	128 Channel Video Transmission System w/Simplex Data	SM	CWDM	44 km	19" rack
<i>SpectraStreamPlus</i> -16-FC	16 Channel Video Transmission System w/Duplex Data	SM	CWDM	44 km	19" rack
<i>SpectraStreamPlus</i> -32-FC	32 Channel Video Transmission System w/Duplex Data	SM	CWDM	44 km	19" rack
<i>SpectraStreamPlus</i> -48-FC	48 Channel Video Transmission System w/Duplex Data	SM	CWDM	44 km	19" rack
<i>SpectraStreamPlus</i> -64-FC	64 Channel Video Transmission System w/Duplex Data	SM	CWDM	44 km	19" rack
<i>SpectraStreamPlus</i> -96-FC	96 Channel Video Transmission System w/Duplex Data	SM	CWDM	44 km	19" rack
<i>SpectraStreamPlus</i> -128-FC	128 Channel Video Transmission System w/Duplex Data	SM	CWDM	44 km	19" rack

Applications



SpectraStream™ and SpectraStreamPlus™

Technical Specifications

Video (per channel)

Video Format	NTSC, PAL
Video Input	1V pk-to-pk into 75Ω
Connector	BNC
Bandwidth	5 Hz to 6.5 MHz (-3 dB)
Differential Gain	≤0.7%
Differential Phase	≤0.7°
SNR	≥67 dBw
Video encoding	Uncompressed 10 bit linear PCM
Video sampling rate	16 MHz

Data^{1,2}

SpectraStream Data Ports	
Interface	Simplex RS485/RS422, Simplex RS232
Connector	RJ45
SpectraStream RS485 Ports	
Interface	Simplex RS485
Connector	RJ45
SpectraStream HS Ports	
Interface	Simplex
Connector	RJ45
SpectraStreamPlus Data Ports	
Interface	Duplex RS485/RS422
Connector	RJ45
SpectraStreamPlus RS485 Ports	
Interface	Duplex 2-Wire
Connector	RJ12
SpectraStreamPlus HS Ports	
Interface	Duplex/Simplex
Connector	RJ45

¹ Simplex ports operate in the TX to RX direction.

² For details refer to the 9152D and 9252D Specification Sheets. Other Data Options are available; consult Optelecom-NKF for details.

Optical CWDM

Power Requirements All systems operate from 100-240 VAC 50/60 Hz

Management 9900 Network Management System (NMS)

Physical Specifications

Model/System Size						
(number of video channels)	16	32	48	64	96	128
No. of 9002 Chassis Transmit End	1	1	1	1	2	2
No. of 9002 Chassis Receiver End	1	1	1	1	2	2
CWDM Unit	Built-in	Built-in	Built-in	Built-in	1U-19"	2U-19"

9002 Chassis Dimensions — 19" rack-mount chassis
 Dimensions (h x w x d) 7 x 19 x 8 in. (177.8 x 442.6 x 203.2 mm)
 Weight (empty) 6.0 lbs. (2721.5 g)

CWDM — 1RU high 19" rack-mount chassis
 Dimensions (h x w x d) 1.75 x 19.0 x 5.87 in. (44.45 x 482.6 x 149.09 mm)
 Weight (approx.) 2.0 lbs. (907.18 gm)

Environmental
 Operating temperature -40° C to +74° C (-40° F to +165.2° F)
 Storage temperature -55° C to +85° C (-67° F to +185° F)
 Relative humidity 0 to 95% noncondensing

Optical	SpectraStream-16	SpectraStream-32	SpectraStream-48	SpectraStream-62	SpectraStream-96	SpectraStream-128
Fiber type (mm)	SM (09)	SM (09)	SM (09)	SM (09)	SM (09)	SM (09)
System link budget	18 dB	18 dB	18 dB	18 dB	18 dB	18 dB
Link length	42 km	60 km	50 km	50 km	15 km	15 km
Min. link loss	0 dB	0 dB	0 dB	0 dB	0 dB	0 dB
Output power	-5 dBm	-3 dBm	-3 dBm	-3 dBm	-3 dBm	-3 dBm
Output wavelength	1310-1550 nm	1510-1570 nm	1510-1610 nm	1470-1610 nm	1330-1610 nm	1310-1610 nm
Input sensitivity	-23 dBm	-21 dBm	-21 dBm	-21 dBm	-21 dBm	-21 dBm
Connector type	FC/ST	FC/ST	FC/ST	FC/ST	FC/ST	FC/ST