

OPTICAL FIBER INSTRUMENTS



OTDRs

Splicing Machines

Power Meter

Fault Finder

Light Detector

Fiber Identifier

Test Fiber

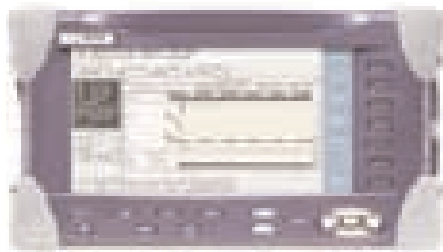
Optical Fiber Attenuators

Terminal Assembly



Optical Fiber Instruments

OTDR-MTS-8000



MTS-8000 is a compact and portable optical network tester with flexible scalable platform. The key feature is its industry leading size and weight. It is remotely controlled (via Ethernet, Fiber)

With the MTS-8000's scalable design, companies can match testing solutions of their unique network environments by purchasing only the features needed. This platform maximizes scalability, manageability, price/performance and flexibility.

The powerful communication capability of the MTS-8000 test platform offers users the ability to remotely control the unit, send data directly to the office, or access the data via internet.

Fiber Characterization testing

- Optical Time Domain Reflectometer (OTDR)
- Chromatic Dispersion (CD)
- Polarization Mode Disperstion (PMD)
- Attenuation Profile (AP)
- Loss testing

OTDR Module

- More than 20 OTDR modules
- Combined wavelengths MM:850/1300
SM:1310/1383/1550/1625 nm
- Dynamic range 30DB upto 50DB

Product Code	Product Description
OT 0010 B	OTDR MTS-8000 Complete set with carry case

OTDR -MT S-6000



MTS-6000 is a compact and light weight test platform designed for the installation and maintenance of fiber networks. It provides field service technicians with the highest levels of performance and upgradeability on the market today.

Modular in design, MTS-6000 offers an extensive portfolio of test functionality with over 40 different fiber modules supporting a wide range of applications. The versatility of the MTS-6000 allow technicians to standardize using one type of test equipment and then introduce new testing capabilities in the field without incurring additional costs

Since the MTS-6000 is compatible with our existing fiber module product line, technicians can exchange plug in modules between the MTS-8000, Multiple Network Test Platform and the MTS-6000. To ensure the highest return on your test equipment existing OTDR modules from the MTS-5100 can be transformed (with extension) for use with the MTS-6000

Product Code	Product Description
OT 0010 A	OTDR MTS-6000 Complete set with carry case

Fusion Splicer Machine - Keyman S 1



Characteristics

- Slide in 5.6" Color Monitor
- Dual Tube Heater
- Innovative Sleeve Loader
- RoHS Compliant
- Large Capacity Battery & Level Meter
- Light Weight
- Compact Size

Optical Fiber Fusion Splicer

The Keyman S1 Arc Fusion Splicer adopts advanced DCA (Direct Core-to-Core Alignment system) with field engineer ergonomic friendly style, compact sized (include monitor, only 150 x 190 x 120mm) and Light Weight (include battery 2.6Kg), Fast (Splice Time: 9sec, tube heat time:26sec) and ECO-friendly RoHS compliant.

Specifications

Alignment	Core-to-Core Alignment
Applicable Fibers	SMF(ITU-T G.652), MMF(ITU-T G.651), DSF(ITU-T G.653), NZDSF(ITU-T G.655)
Fiber cleave Length	250um (Coat): 8 ~ 16mm; 250um ~ 1000um: 16mm
Typical splice Loss	SMF: 0.02dB, MMF: 0.01dB, DSF: 0.04Db, NZDSF: 0.04dB
Return Loss	> -60dB
Splice Time (typical)	SPLICE: 9sec, Tube Heat: 26sec with S-160(60mm) Tube
Program	SPLICE mode: 40: Heat mode: 13
Operating Altitude	0 ~ 5000 m above sea level
Operating Temperature	-10 ~ +50°C 95% RH (non-condensing)
Wind Protection	15m/s
Power	DC 14.8V Battery (5600 mAh), 100 ~ 240VAC Charger
Battery Life (typical)	100 cycle with S-1B, 300 cycle with S-SB
Electrode	> 3000 times
Tension Test	2N / (4.4N-Optional)
Size (mm)	150 x 190 x 120
Weight (g)	2.6Kg (with battery)

Standard Package (Kit): Inclusive of Arc Fusion Splicer (Keyman S1), AC Charger (S-11), Sleeve Loader (S-12), Spare Electrodes (S-1E), Battery Pack (S-1B), Cleaver (CI-03), Transport Case and User Manual.

Product Code	Product Description
FU 0009 A	Fusion Splicer-keyman S1

Optical Fiber Instruments

Auto Stripper (Strip + Clean + Cleave)



Heating Strip + Clean + Cleave

Excellent performance everywhere such in the manhole or up at the telegraph pole, in a flat!

High Productivity

- Covers the time for Stripping, Cleaning and Cleving less than 7 secs
- Skill free for beginner, no training cost required
- No matter where the performance in the manhole, up at the telegraph pole, in a flat
- Easy operation, Save the time of work

Convenience

- Available 3 Operations (Stripping + Cleaning + Cleving) within one tool
- Portable and easy operation and maintenance
- One action cleaving & fiber trash collected automatically
- Compatible with all splicers in the market today
- Can be used both for single mode and for multimode fibers

High Quality

- High tensile strength due to no cracking
- Remarkably improved end face without cracks as being controlled by a damper,

Safe & Environment Friendly

- Uninflammable, using ensolv
- Fiber trash collected automatically

Product Code	Product Description
TO 0108 A	Tool, Auto Stripper (Strip, Clean, Cleave-3 in 1)

Cable and Antena Analyser



This cable and antena analyzer is a light weight portable diagnostic tool that accurately detects operational problems in the infrastructure of the base station and repeaters.

It has all of the measurement functions necessary to accuratley characterize the site's antenna system,including Voltage Standing Wave Ratio(VSWR),Distance To Fault(DTF),cable loss and power measurements.

Frequency range is from 40MHZ to 4.0GHZ
Rechargeable and field replacable Lithium-ion-Battery
It is easy to use, equipped with touch panel colour display allowing rapid measurements and obtaining results clearly displayed. Its application specific software allows the user to compare and analyze measurements and generate professional reports.

Product Code	Product Description
CA 1233 B	Cable and Antenna analyzer Complete set

Optical Fiber Instruments

Power Meter



Industry's first auto-zeroing function provides outstanding accuracy with no manual zeroing necessary.

Illuminated graphical user interface displays all necessary parameters and upto 3 test results simultaneously.

Upto 900 calibrated wavelengths for the highest performance range in the industry.

A large storage capability for upto 1000 results with automatic date/time stamp.

A usb port for remote operation as well as easy microsoft excel based report generation and analysis

A unique power supply management system on the market with 4 different ways of powering units

A robust, shock-proof and splash-proof design for field operation

Product Code	Product Description
PO 0046 A	Power meter 780-1600nm,-70 to +20dbm sm-mm
PO 0045 A	Power meter 1310/1490/1550 nm sm

Light Source



Laser source with upto four wavelengths offers flexibility in singlemode and multimode applications.

The available nominal wavelengths are 1310 and 1550nm.

Nominal output power is -7.0 dbm to 0 dbm, seperately adjustable.

High output level stability due to built in optical isolator and optical power control.

Powered by 4 dry batteries mignon/AA, operating time is above 45 hours.

The instrument switches off automatically after 20 min.

Product Code	Product Description
LI 0006 B	Single mode light source 1310/1550nm,universal adapter

Optical Fiber Instruments

Visual Fault Finders



Used to quickly locate bending loss and breaks in optical fibers, and to identify bad connectors.

- 635nm red laser makes fiber breaks and bending losses easily visible.
- Stable, Calibrated output.
- Continuous and blinking wave output
- Optional AC power converter/Adapter available for bench top or prolonged use.
- Rugged and splash proof.
- Available with FC/PC or MTRJ adapters.
- Range upto 3 KM
- More than 30 hours of continuous operation

Product Code	Product Description
VI 0005 A	FC/PC , 3 KM , SM, MM
VI 0006 A	MT-RJ , 1 KM , MM

Visual Fault Finder



Fiber breaks, microbends and poor optical splices are clearly visible as light glows through the fiber buffer or outer jacket.

- Rugged metal housing, pen size-format.
- Light weight.
- Universal push-pull interfaces(upp) for 2.5mm and 1.25mm.
- Visible laser light at 635 nm.
- Usable with single mode and multi mode fibres
- Range upto 5 km.
- Operates for over more than 45 hours.

Product Code	Product Description
VI 0007 B	Pen size visual fault locator

Bare Fiber Adapter



Allows temporary connection of 125 micron multimode or single mode fiber to measuring equipments. Includes a durable 2.5mm tungsten carbide ferrule and a ferrule cleaning tool.

Product Code	Product Description
BA 0003 A	125 mm, FC style connector

Single Mode Loss Tester



Packaged to operate in specific fiber applications, accurate attenuation measurements in minimum Wavelength range is about 800 - 1625nm Source has stable, Calibrated output and rugged to easy use.

Product Code	Product Description
LO 0016 A	Loss test with charger adapter

Multifunction Loss Tester



This multifunction loss test set offers a highly versatile handheld test instrument which has been specially developed in response to those industry standards

Easy-to-use all-in-one prepackaged kit
FTTx ready by integrating dedicated wavelengths (1310/1490/1550) for PON testing as well as an optimised test sequence for increased field productivity
0.01db display resolution

Product Code	Product Description
LO 0039 A	Multi function loss test set with(soft carry case,adapter)

Fiber Micro Scope



Product Code	Product Description
MI 0009 A	200 X Microscope
MI 0010 A	400 X Microscope

Optical Fiber Instruments

Fiber Identifier



Interchangeable head for ribbon, jacketed and coated fibers allow virtually any fiber to be identified.

Product Code	Product Description
FI 0009 A	Range - (0 , -40 dBm)
FI 0010 A	Range - (0 , -40 dBm) with relative power
FI 0008 A	Range - (+20 , -20 dBm)

Fiber Talk set



- Clear digital voice transmission
- Hands free operation
- Rugged casing

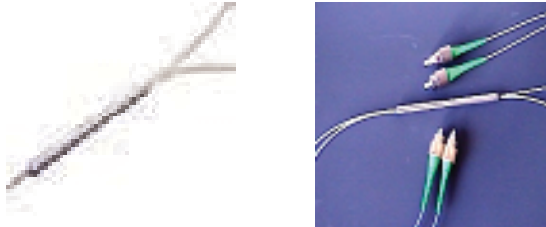
Product Code	Product Description
TA 0002 B	1550nm,45db
TA 0002 A	1310nm,30db

Fiber Optic Couplers



Product Code	Product Description
CO 0161 A	SM, 1 x 2 Coupler
CO 0162 A	SM, 1 x 4 Coupler
CO 0163 A	SM, 1 x 8 Coupler
CO 0158 A	MM, 1 x 2 Coupler
CO 0159 A	MM, 1 x 4 Coupler
CO 0160 A	MM, 1 x 8 Coupler

Wavelength Division Multiplexer



Two different wavelength carrying different information is coupled to a single fiber. Increases the efficiency of the network. It is available in different standard connectors and wavelengths. Widely used in Telecommunication, CATV networks

Product Code	Product Description
WA 0022 A	980/1550 1 x 2 multiplexer
WA 0023 A	980/1550 2 x 2 multiplexer
WA 0018 A	1310/1550 1 x 2 multiplexer
WA 0019 A	1310/1550 2 x 2 multiplexer
WA 0020 A	1480/1550 1 x 2 multiplexer
WA 0021 A	1480/1550 2 x 2 multiplexer

Test Fiber



Test fiber is a spool of Optical fiber with a length ranging from 300 meter to 5 kilometer length in a box. This is used for accurate OTDR & other optical fiber measurements. A standard test fiber at the beginning of a fiber span will protect the actual fiber from falling into the dead zone of the instrument.

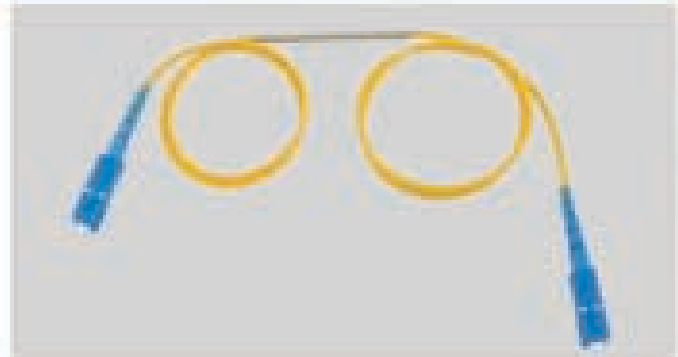
- Used to remove the "dead zone" from OTDR measurements
- Used as calibration comparison for OTDR measurements
- Single mode or Multi mode fiber available.
- Can be terminated with any style connector.
- Impact and crush resistant packing.

Product Code	Product Description
TE 0014 A	SM 300 M Test fiber box
TE 0013 A	SM 1000 M Test fiber box
TE 0015 A	SM 5000 M Test fiber box
TE 0011 A	MM 300 M Test fiber box
TE 0010 A	MM 1000 M Test fiber box
TE 0012 A	MM 5000 M Test fiber box

Optical Fiber Attenuators



Plug type fixed attenuators



In-line type fixed attenuators

APPLICATIONS

- Telecommunication networks
- CATV networks
- Local Area Network
- Active device termination
- Data system networks

FEATURES & BENEFITS

- Compliant with - JIS C-5973, IEC
- 100% factory tested
- High power endurance
- Modal Noise
- Low polarization insensitive
- Convenience and compact design
- Low price

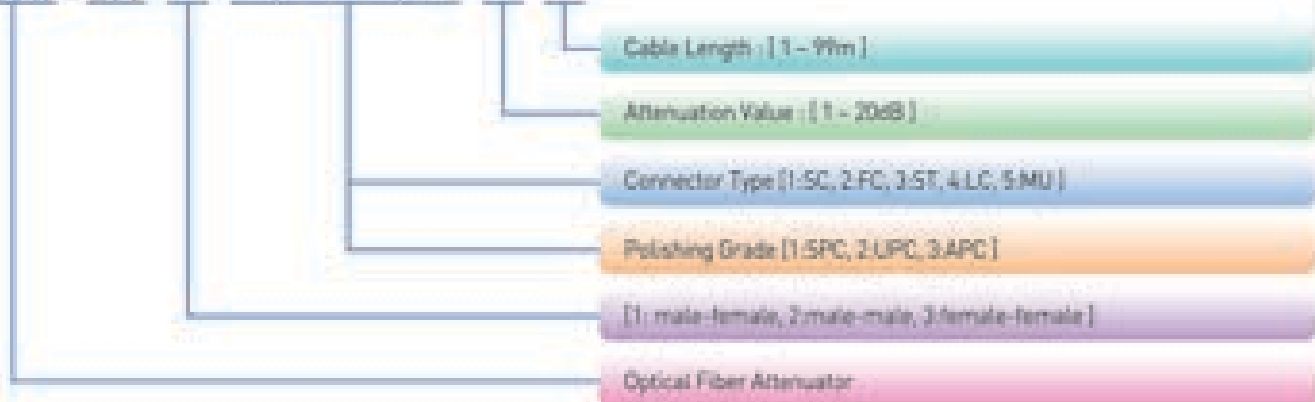
SPECIFICATION

(Unit: dB)

Characteristics	Conditions	Value		
		Min	Typ	Max
Attenuation			1 - 10	
			15, 20	
Return Loss	SPC	40	45	
	LPC	50	55	
	APC	60	65	
Attenuation Accuracy	1 - 10dB			+0.5
	15, 20dB			±1.0
Operating Wavelength(nm)		1310 and 1550(1650)		
Operating Temperature		-40℃ ~ +80℃		
Humidity		75℃, RH 95%		

ORDERING INFORMATION

OFAT - SM - [] - [] / [] - [] / [] - [] - []





APPLICATIONS

- Receiver padding
- Lab or field and installation
- System testing and installation
- Optical power equalization

FEATURES & BENEFITS

- Wide attenuation range
- Precise resolution
- Low polarization dependent loss
- Low insertion loss
- Customer-specified attenuation range
- Low back-reflection

SPECIFICATION

Type	Patch Type	Plug-In Type			
Connector Type	SC, FC, ST	SC, FC			
Grade	N	N	APC Only		S
Applicable optical connector (Female to Male)	UPC to UPC	UPC to UPC	UPC to APC	APC to APC	APC to APC
Attenuation Variable Range (1270nm, 1550nm)	26dB	26dB	26dB	26dB	26dB
Minimum Attenuation Value	1dB	4dB	1dB	1dB	1dB
Return Loss @ > 4dB (Attenuation Value)	13dB	13dB	35dB - 50dB	> 50dB	> 40dB
Resolution	0.5dB				
Operation Temperature	-10°C - 60°C				
Storage Temperature	-40°C - 70°C				

Product Code	Product Description
AT 0023 A	Attenuator Variable optical

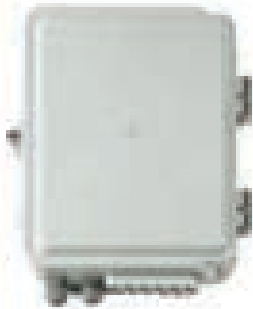
Patch Panel



FEATURES & BENEFITS

- Design registration (PSC-FSP-24P)
- construct level CAT 5E high speed network
- 19-inch RACK standard design, easy to be set up
- This technology is just for the internal standard residence / business building of precincts correspondence line equipment
- Every PORT use the discern icon
- Easy to numbering

OTP



APPLICATIONS

- Construct the FTTH network
- Size: 320 x 245 x 85mm
- total weight: about 1.4kg
- Faucet: 2
- outlet: 16

FEATURES & BENEFITS

- The simple design can fix the member mark
- Convenient in locale work
- Convenient in locale work
- Load light splitter
- It can protect thin light cable and pipeline light cable
- It is made by the high rigidity plastic material, use the front and back of the inside tray, it can contain 2 RN splitter and 14 light outside line at the most
- It can be constructed on the electric poles or exterior wall of buildings

Splice Trays

APPLICATIONS

- For use with indoor or outdoor splice hardware
- Telecommunication networks
- CATV Networks, Local Area Network
- Active Device Termination
- Data System Networks

FEATURES & BENEFITS

- Craft-friendly design
- Available for many splicing methods
- Used for multi-mode or single-mode systems
- Low excess loss & high performance
- Retractable splicing tray
- Convenience and ease of handling
- Low price



F-TRAY-1



F-TRAY-2

SPECIFICATION

Parameters		Unit	F-TRAY-1	F-TRAY-2
Fiber Capacity		Cores	24	24
	H	mm	11	12
Dimension	W	mm	160	225
	D	mm	108	110
REMARK				

Optical Connector for Site Assembling



Applicable Fiber	Single Mode / 9/125 μ m
Connection Loss	Max: Less than 0.5dB, Avg: Less than 0.3dB
Return loss	45dB
Polishing	PC
Temperature	Max: Less than 0.5dB, Avg: Less than 0.3dB (-20 ~ 60 $^{\circ}$ C)
Tensile Strength	Max: 0.25Kg, Less than 0.5dB, Avg: Less than 0.3dB
Coupling Method	Push-on Method

Product Code	Product Description
CO 0438 A	Connector Optical For Site Assembling

Ferrule Inspection Scope



Aerotech's new line of variable magnification inspection microscopes all have a standard magnification range of 150X - 400X. All units supplied with FC/PC, SC/PC and 2.5mm patch cord viewing tips as standard, with optional tips available for LC, MU, SC/APC, FC/APC, E2000 and other connectors. Software for all units runs on standard Windows operating system.

Product Code	Product Description
FE 0005 A	Ferrule Inspection Scope

Laser Fault Locator



FEATURES & BENEFITS

- Locates breaks, bends even through jacketed fibers
- Troubleshoots faults within OTDR dead zone
- End-to-end fiber identification
- Small size, pocket tools

Power source	LD
Wavelength	650nm
Output power	5dBm(3mW)
Fiber identified distance	>5 km
Output interface	Multi-function (SC, FC, ST, LC)
Usage temperature	-10 $^{\circ}$ C ~ +50 $^{\circ}$ C
Storage temperature	-20 $^{\circ}$ C ~ +80 $^{\circ}$ C
Weight I	58g
Length	147mm
Diameter	16mm
Continuous worktime	16H

Product Code	Product Description
FA 0001 A	Fault Locator Laser

PLC Splitter (Planar Lightwave Circute Splitter)



Fig. 1. 1x4 PLC splitter

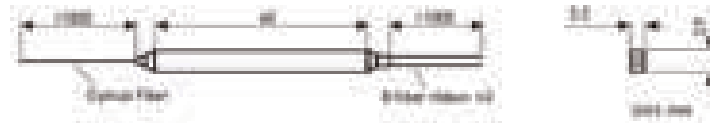


Fig. 2. 1x8 splitter

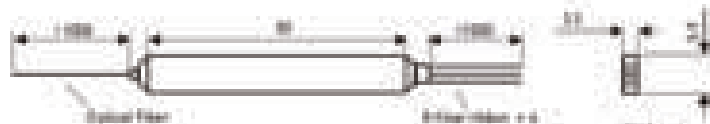


Fig. 3. 1x32 splitter

APPLICATIONS

- FTTx Systems
- LAN, WAN and Metro Networks
- Analog/Digital Passive Optical Networks
- CATV Networks
- Other applications in fiber optic systems

FEATURES & BENEFITS

- Compact designing
- Low insertion loss and low PDL
- High reliability
- High channel counts
- Wide wavelength range
- Large operating temperature range
- Customized packaging and configuration

SPECIFICATION

Part Configuration	1x4	1x8	1x16	1x32
Fiber	SMF-28 or SMF-28e			
Operation Wavelength (nm)	1260 - 1650			
Insertion Loss (dB)	≤7.4/7.2	≤10.7/10.5	≤13.7/13.5	≤16.7/16.5
Uniformity (dB)	≤0.5	≤0.8	≤1.2	≤1.5
Polarization Dependent Loss (dB)	0.2	0.2	0.3	0.3
Return Loss (dB)	≥50/55			
Directivity (dB)	≥ 55			
Operating Temperature (°C)	-40 - +85			
Storage Temperature (°C)	-60 - +85			
Package Dimension (mm)	(L) × (W) × (H) 40 × 3.9 × 3.2	(L) × (W) × (H) 40 × 3.9 × 3.2	(L) × (W) × (H) 40 × 3.9 × 3.2	(L) × (W) × (H) 50 × 4.0 × 3.2

Product Code	Product Description
SP 0090 A	PLC Splitter Fiber Optic



MODULE TYPE



44mm PANEL TYPE



TYPE After build into CARD

APPLICATIONS

- ITV(CCTV), CATV
- Traffic control SYSTEM
- SECURITY SYSTEM
- ITS SYSTEM
- Produce control SYSTEM
- Video conference SYSTEM

SPECIFICATION

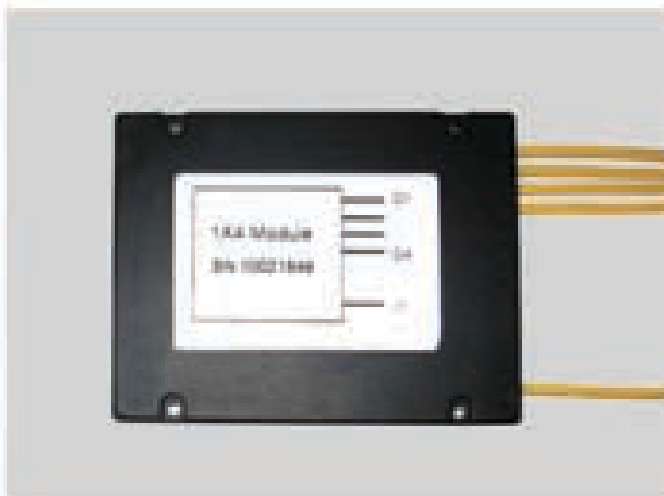
ITEM	CONDITIONS		REMARK	
COMPLETE BANDWIDTH	10 Hz to 10 MHz			
INPUT / OUTPUT IMPEDANCE	75Ω		Unbalance	
INPUT / OUTPUT VOLTAGE	1 Vp-p			
SIGNAL TO NOISE RATIO	60 dB @ 10			
DIFFERENTIAL PHASE	Under the 4%		Input/output phase difference	
DIFFERENTIAL GAIN	Under the 4%		Input/output disparity	
OPERATING DISTANCE	3, 5, 7, 10, 20, 50, 80m		It can be 120m(OPTION)	
OPERATING WAVELENGTH	850nm, 1300nm, 1550nm			
FIBER OPTIC CABLE	Multi-Mode(62.5/125μm), Single-Mode(9/125μm)		50 / 125μm Core/Clad-OM3	
MODULATION FORM	P.F.M			
OPTICAL CONNECTOR	ST TYPE		OPTION	
OPERATING TEMPERATURE	-20℃ to +50℃		-40℃(OPTION)	
SIGNAL CONNECTOR	BNC TYPE		OPTION	
POWER REQUIREMENT	AC 110/220V Available		±10%	
DIMENSION	Module	162(W) × 300(H) × 100(D)	125(W) × 26(H) × 64(D)	OPTION Unit:mm
OF	44mm PANEL	483(W) × 44(H) × 305(D)	483(W) × 44(H) × 305(D)	
TYPE	CARD(Slot)	483(W) × 132(H) × 200(D)	483(W) × 132(H) × 200(D)	

ORDERING INFORMATION

FSVF- K - TX/RX



Demux Module



APPLICATIONS

- DWDM/DWDM System
- CATV System

FEATURES & BENEFITS

- Low Insertion Loss
- High Channel Isolation
- Epoxy-Free in Optical Path
- 2.8 Channels Configuration

SPECIFICATION

Parameter		Unit	Specifications		
Channels Number		Ch	4	8	
Central Wavelength		nm	1470, 1490 ... 1610		
Channel Spacing		nm	20		
Channel Passband		Min	nm		
Insertion Loss		Max	dB		
Isolation	Mux	Adjacent Channel	Min	dB	15
		Non-adjacent Channel	Min	dB	15
	De-mux	Adjacent Channel	Min	dB	30
		Non-adjacent Channel	Min	dB	45
Ripple in Passband		Max	dB		0.5
Polarization Dependent Loss		Max	dB		0.15
Directivity		Min	dB		50
Return Loss		Min	dB		45
Polarization Mode Dispersion		Max	ps		0.1
Power Handling		Max	mW		500
Fiber Type					Corning SMF - 28/SMF - 28e
Operating Temperature		°C			0-70
Storage Temperature		°C			-40-85
Package Dimension		mm			IL100 x W980 x H110 or IL125 x W996 x H116

Product Code	Product Description
DC 0006 A	Demux Module



M28876/6 Plug



M28876/11 Jam Nut Receptacle



M28876/1 Wall Mount Receptacle



HQ40 Hermaphroditic Quad Multway connector



Emergency renew Roll Cable



P53H 10004-Channel Hermaphroditic Plug



Mil SC Connector



Military Grade ST Cord



MTRJ & LC Field Type Connector

MIL Dry Core cable

APPLICATIONS

- U.S. Navy shipboard, surface craft and submarines
- Mission critical combat and communications systems
- Mobile tactical shelters electronic battlefield networks
- Mobile Emergency Telecommunications (MET) stations
- Deployable outdoors in harsh environments

FEATURES & BENEFITS

- Precision machined to MIL-PRF-28876, Rev. E specification
- Available in 3 shell sizes: 13 (4 ch), 15 (4, 8 ch), 23 (18, 31 ch)
- Six keying options (plus universal keying for COTS product) for both plugs and receptacles
- Inserts are interchangeable from plug to receptacle. Either can be operated with pins or socket termini
- Fully intermediate with all qualified M28876 connectors
- Operates with all qualified single mode or multi mode M28876/14 and /15 termini
- Complete line of straight, 45-degree and 90-degree back shells
- COTS version available