

Notice inviting quotation for Communication & Network Laboratory,
Department of ECE under MODROB

Serial No.	Details		Quantity																																				
1	OTDR: <table border="1" data-bbox="376 701 1082 1883"> <tr> <td data-bbox="376 701 448 786">1</td> <td data-bbox="448 701 730 786">Type of fiber</td> <td data-bbox="730 701 1082 786">SM</td> </tr> <tr> <td data-bbox="376 786 448 873">2</td> <td data-bbox="448 786 730 873">Central Wavelength</td> <td data-bbox="730 786 1082 873">1310/1550nm ± 20nm 1550/1625nm ± 20nm</td> </tr> <tr> <td data-bbox="376 873 448 960">3</td> <td data-bbox="448 873 730 960">Dynamic Range (dB)</td> <td data-bbox="730 873 1082 960">44/44 38.5/36.5</td> </tr> <tr> <td data-bbox="376 960 448 1090">4</td> <td data-bbox="448 960 730 1090">Dead Zone Event Attenuation</td> <td data-bbox="730 960 1082 1090">2m 8m</td> </tr> <tr> <td data-bbox="376 1090 448 1133">5</td> <td data-bbox="448 1090 730 1133">Pulsewidth</td> <td data-bbox="730 1090 1082 1133">10ns to 20 μs</td> </tr> <tr> <td data-bbox="376 1133 448 1220">6</td> <td data-bbox="448 1133 730 1220">Distance Range(Km)</td> <td data-bbox="730 1133 1082 1220">0 to 320km</td> </tr> <tr> <td data-bbox="376 1220 448 1308">7</td> <td data-bbox="448 1220 730 1308">Distance Accuracy</td> <td data-bbox="730 1220 1082 1308">± 2m ± (10⁻⁴ × dist)</td> </tr> <tr> <td data-bbox="376 1308 448 1350">8</td> <td data-bbox="448 1308 730 1350">IOR setting</td> <td data-bbox="730 1308 1082 1350">1.400000 to 1.699999</td> </tr> <tr> <td data-bbox="376 1350 448 1438">9</td> <td data-bbox="448 1350 730 1438">Readout Resolution</td> <td data-bbox="730 1350 1082 1438">0.01dB</td> </tr> <tr> <td data-bbox="376 1438 448 1518">10</td> <td data-bbox="448 1438 730 1518">Connection check</td> <td data-bbox="730 1438 1082 1518">On/Off switchable.</td> </tr> <tr> <td data-bbox="376 1518 448 1727">11</td> <td data-bbox="448 1518 730 1727">Threshold :- Connection check- Return loss- Fiber loss-</td> <td data-bbox="730 1518 1082 1727">0.01 to 9dB 20 to 60dB 1 to 10dB</td> </tr> <tr> <td data-bbox="376 1727 448 1883">12</td> <td data-bbox="448 1727 730 1883">Display</td> <td data-bbox="730 1727 1082 1883">7.2 inch colour LCD</td> </tr> </table>		1	Type of fiber	SM	2	Central Wavelength	1310/1550nm ± 20nm 1550/1625nm ± 20nm	3	Dynamic Range (dB)	44/44 38.5/36.5	4	Dead Zone Event Attenuation	2m 8m	5	Pulsewidth	10ns to 20 μs	6	Distance Range(Km)	0 to 320km	7	Distance Accuracy	± 2m ± (10 ⁻⁴ × dist)	8	IOR setting	1.400000 to 1.699999	9	Readout Resolution	0.01dB	10	Connection check	On/Off switchable.	11	Threshold :- Connection check- Return loss- Fiber loss-	0.01 to 9dB 20 to 60dB 1 to 10dB	12	Display	7.2 inch colour LCD	one
1	Type of fiber	SM																																					
2	Central Wavelength	1310/1550nm ± 20nm 1550/1625nm ± 20nm																																					
3	Dynamic Range (dB)	44/44 38.5/36.5																																					
4	Dead Zone Event Attenuation	2m 8m																																					
5	Pulsewidth	10ns to 20 μs																																					
6	Distance Range(Km)	0 to 320km																																					
7	Distance Accuracy	± 2m ± (10 ⁻⁴ × dist)																																					
8	IOR setting	1.400000 to 1.699999																																					
9	Readout Resolution	0.01dB																																					
10	Connection check	On/Off switchable.																																					
11	Threshold :- Connection check- Return loss- Fiber loss-	0.01 to 9dB 20 to 60dB 1 to 10dB																																					
12	Display	7.2 inch colour LCD																																					
2	Optical power meter -1		One																																				

TECHNICAL SPECIFICATIONS

Powermeter

Photo-receiver: InGaAs PIN photodiode

Optical parameters

Modulated measurable signals : from 20 Hz to 100 kHz
Measurable wavelength: 850 nm, 1310 nm and 1550 nm
and 1330 nm

Measurement dynamic range : from -70 dBm to + 5 dBm
at 1310 nm and 1550nm from -60 dBm to + 1 dBm at 850
nm

Instrumental parameters

Resolution: 0.01dB

Accuracy: 0.2 dB @ -20 dBm

Stability: 0.1 dB @ -20 dBm

Connection types: FC/PC, ST, SC and E2000 (depending
on the model)

Power supply

Power supply: 6 alkaline / NiCd batteries of the AA type
(I.E.C. LR6) 900 mAh

Operating voltage: 6.9 VDC

Minimum operating voltage : 6.5 VDC

Autonomy: 16 h

Power supply voltage (battery charger): 230 VAC @ 50 Hz
/ 12 VDC \pm 10%

Charge current: 100 mA to 110 mA

Charge current + back-up operation: maximum 110 mA +
70 mA

Physical parameters

Weight (batteries excluded): approximately 300 gr.

Operating temperature : -10°C \div +50°C 90% UR

	<p>Storage temperature : -15°C ÷ +60°C 90% UR Mechanical dimensions : H 185 x L 100 x P 50 mm Reference temperature = 20°C, heating time min. 20 minutes.</p>	
3	<p>FC type fiber optic</p> <p>FC type fiber optic connectors HRFC Series</p> <p>Generic Name FC Operating Temperature Range (ç) -25 to 70 Storage Temperature Range (ç) -25 to 70 Return Loss (dB) 22dB min.(PC),40dB min.(AdPC),60dB(APC) Insertion Loss (dB) 0.5dB max.(PC,AdPC,APC)0.3dB max.(PC) Industry Standard NTT,JIS,IEC</p> <p>SC type fiber optic connectors</p> <p>HSC Series</p> <p>Item Requirements</p> <p>Generic Name SC Operating Temperature Range (ç) -25 to 70 Storage Temperature Range (ç) -25 to 70 Return Loss (dB) 22dB min.(PC),40dB min.(AdPC),60dB min.(APC) Insertion Loss (dB) 0.5dB max.(PC, AdPC, APC) 0.3dB max.(PC) Industry Standard NTT, JIS, IEC, ANSI</p>	one
4	Optical fiber cleaver	one

	<table border="1"> <tr> <td>Fiber Type</td> <td colspan="2">Silica glass-based optical fiber</td> </tr> <tr> <td>Fiber Count</td> <td colspan="2">Single to 12-fiber ribbon</td> </tr> <tr> <td>Coating Diameter</td> <td colspan="2">Single Fiber: 250µm to 900µm Ribbon Fiber: 250µm to 400µm</td> </tr> <tr> <td>Cleave Length (1)</td> <td>Adjustable: 3-20mm Fixed Length: 16mm</td> <td>Adjustable: 3-20mm Fixed Length: 10mm</td> </tr> <tr> <td>Dimensions</td> <td colspan="2">95W x 63D x 53H (mm)</td> </tr> <tr> <td>Weight</td> <td colspan="2">570g</td> </tr> </table>	Fiber Type	Silica glass-based optical fiber		Fiber Count	Single to 12-fiber ribbon		Coating Diameter	Single Fiber: 250µm to 900µm Ribbon Fiber: 250µm to 400µm		Cleave Length (1)	Adjustable: 3-20mm Fixed Length: 16mm	Adjustable: 3-20mm Fixed Length: 10mm	Dimensions	95W x 63D x 53H (mm)		Weight	570g																
Fiber Type	Silica glass-based optical fiber																																	
Fiber Count	Single to 12-fiber ribbon																																	
Coating Diameter	Single Fiber: 250µm to 900µm Ribbon Fiber: 250µm to 400µm																																	
Cleave Length (1)	Adjustable: 3-20mm Fixed Length: 16mm	Adjustable: 3-20mm Fixed Length: 10mm																																
Dimensions	95W x 63D x 53H (mm)																																	
Weight	570g																																	
5	<p>Splicing machine</p> <p>SPECIFICATIONS</p> <table border="1"> <thead> <tr> <th>ITEM</th> <th>DESCRIPTION</th> </tr> </thead> <tbody> <tr> <td>Splicing Method</td> <td>Core-Alignment</td> </tr> <tr> <td>Fiber Type(1)</td> <td>SMF, MMF, DSF, NZDSF, EDF, TW, LF, HI1060, and many more</td> </tr> <tr> <td>Cladding Diameter</td> <td>80µm - 220µm</td> </tr> <tr> <td>Coating Diameter</td> <td>100µm - 1000µm</td> </tr> <tr> <td>Average Loss (2)</td> <td>SMF: 0.02dB, MMF: 0.01dB, DSF: 0.04dB</td> </tr> <tr> <td>Splice Time</td> <td>9 sec.</td> </tr> <tr> <td>Heat Time</td> <td>37-second (40mm), 51-second (60mm)</td> </tr> <tr> <td>Applicable Sleeves</td> <td>20 - 60mm</td> </tr> <tr> <td>Cleave Length</td> <td>150 - 200mm: 5mm, 250mm: 5 ~ 16mm; 400 / 900mm: 10, 16mm</td> </tr> <tr> <td>Magnification</td> <td>Up to 608X</td> </tr> <tr> <td>Dimensions</td> <td>130W x 260D x 137H (mm)</td> </tr> <tr> <td>Power</td> <td>AC Input: 85 to 264VAC (50/60Hz) DC Input: 11 to 17VDC, Battery: Li-ion</td> </tr> <tr> <td>Battery</td> <td>Internal Battery - 70 splice cycles External Battery (option) - 350 splice cyc</td> </tr> <tr> <td>Splice Memory</td> <td>2000 splices</td> </tr> <tr> <td>Op. Environment</td> <td>0 - 4,000m, -10 to +50 C and 90% at 38 C</td> </tr> </tbody> </table>	ITEM	DESCRIPTION	Splicing Method	Core-Alignment	Fiber Type(1)	SMF, MMF, DSF, NZDSF, EDF, TW, LF, HI1060, and many more	Cladding Diameter	80µm - 220µm	Coating Diameter	100µm - 1000µm	Average Loss (2)	SMF: 0.02dB, MMF: 0.01dB, DSF: 0.04dB	Splice Time	9 sec.	Heat Time	37-second (40mm), 51-second (60mm)	Applicable Sleeves	20 - 60mm	Cleave Length	150 - 200mm: 5mm, 250mm: 5 ~ 16mm; 400 / 900mm: 10, 16mm	Magnification	Up to 608X	Dimensions	130W x 260D x 137H (mm)	Power	AC Input: 85 to 264VAC (50/60Hz) DC Input: 11 to 17VDC, Battery: Li-ion	Battery	Internal Battery - 70 splice cycles External Battery (option) - 350 splice cyc	Splice Memory	2000 splices	Op. Environment	0 - 4,000m, -10 to +50 C and 90% at 38 C	one
ITEM	DESCRIPTION																																	
Splicing Method	Core-Alignment																																	
Fiber Type(1)	SMF, MMF, DSF, NZDSF, EDF, TW, LF, HI1060, and many more																																	
Cladding Diameter	80µm - 220µm																																	
Coating Diameter	100µm - 1000µm																																	
Average Loss (2)	SMF: 0.02dB, MMF: 0.01dB, DSF: 0.04dB																																	
Splice Time	9 sec.																																	
Heat Time	37-second (40mm), 51-second (60mm)																																	
Applicable Sleeves	20 - 60mm																																	
Cleave Length	150 - 200mm: 5mm, 250mm: 5 ~ 16mm; 400 / 900mm: 10, 16mm																																	
Magnification	Up to 608X																																	
Dimensions	130W x 260D x 137H (mm)																																	
Power	AC Input: 85 to 264VAC (50/60Hz) DC Input: 11 to 17VDC, Battery: Li-ion																																	
Battery	Internal Battery - 70 splice cycles External Battery (option) - 350 splice cyc																																	
Splice Memory	2000 splices																																	
Op. Environment	0 - 4,000m, -10 to +50 C and 90% at 38 C																																	
6	<p>Laser source</p> <p>Laser with drive circuit</p> <p>Output power: 0 dBm (laser) Double wavelength: 1310/1550 nm (laser)</p>	one																																

	Attenuator: 6 dB in steps of 0.1 dB Tone generator: 2 kHz for fiber identification Auxiliary input: external data modulation	
7	Optical detector	one
8	LAN/WLAN Training system consisting of: LTS-01 Local area network trainer hardware L-SIM LAN protocol simulator and analyzer software	two
9	Network simulation software	one
10	Data communication trainer with following features: Ports: Serial & Parallel Media: Twisted pair, Fiber Optic & Infra Red Protocols: Stop-n-wait, Go back to N & Selective Repeat	two



Principal-In-Charge
Asansol Engineering College