

GRI	Compatible Splicing machine for FBG sensor based dynamic strain monitoring system	GRI NO. : GRI/27/01/17-18 DATE : 01.08.2017 PAGE : 1 OF 2
-----	---	---

1.0 APPLICATION :

- The device shall be used for joining/splicing of FBG sensors with minimum loss of light intensity.
- The machine can also be used for mounting/installation of end connectors (Type: FC/APC) of FBG sensors.
- The device should be portable and easy in handling.

2.0 SPECIFICATIONS: Broad specifications are given below:

- Applicable Fibers: Single-mode, Multimode and Erbium-doped fiber
- Cladding Diameter: Min 50 μ m to Max 200 μ m
- Coating Diameter: Min 50 μ m to Max 1,500 μ m
- Fiber Cleave Length: 5 mm to 15 mm
- Typical Average Splice Loss: 0.01 dB to 0.04 dB
- Splicing Time: $\leq$ 10 sec
- Magnification: Minimum 250X for single X or Y view, or 150X for X and Y view
- Tube Heater: Built-in tube heater ; auto-start function
- Splice/Heat Cycles with Battery: Minimum 150 cycles with power save functions
- Electrode Life: Minimum 4,000 Arc Discharges
- Weight: light weight and compact in size

2.1 Environmental Conditions :

- Power Supply: Auto voltage selection from 100 to 240 V AC at 50 Hz or 10 to 15 V DC with battery
- Operating Condition: 0 to 95% RH and 0 to 50°C

Prepared by	Avinash/Vipin, Sr. Engr. (GRI)	Avinash 01.08.17
Checked by	D. S. More, DGM (ISE & GRI)	D. S. More 01.08.17
Approved by	Ram Sewak, AGM (GRI & labs)	Ram Sewak 01.08.17

GRI	Compatible Splicing machine for FBG sensor based dynamic strain monitoring system	GRI NO. : GRI/27/01/17-18 DATE : 01.08.2017 PAGE : 2 OF 2
-----	---	---

3.0 Pre-Qualification Requirement :

Only OEM or OEM authorized vendor should quote the system. In the latter case, authorisation letter must be submitted. Only those vendors (OEMs/ Authorised vendor), who have supplied at least one Splicer machine in past two years (on the date of opening of tender) to reputed institution/ organizations and is presently working satisfactorily for more than one year (on the date of opening of tender) should quote.

The following information should be furnished by vendor(s).

- Name of the customer/company whom the equipment has been supplied.
- Complete postal /email address of the customer/user.
- P.O. No, date, scope of supply and Month & year of commissioning
- Name, designation, phone no., email etc. of contact person
- Performance certificate, and not the commissioning report, directly from the customer(s) regarding satisfactory performance of the equipment.

4.0 Commissioning: The party will have to demonstrate the working of the machine at our works.

5.0 General Conditions:

- Preferably, the party should quote all the essential items/ accessories, even if they have not been specified.
- The party shall provide operation manual, if required.

Prepared by	Avinash/Vipin, Sr. Engr. (GRI)	Amritha 01.08.17
Checked by	D. S. More, DGM (ISE & GRI)	Amritha 01.08.17
Approved by	Ram Sewak, AGM (GRI & labs)	Amritha 11/8/2017