

# 1. GENERAL

The FSM-30S arc fusion splicer is designed to splice optical glass fiber for telecommunications. The features are described below:

- Normal single-mode fiber(SM), multi-mode fiber(MM), dispersion shifted fiber(DS), cutoff shifted fiber(CS) and Erbium doped fiber(ED) are applicable for splicing. Carbon coated fiber and Titan fiber are also applicable.

- The splicer performs the fiber gap set, core/cladding alignment, splicing and loss estimation automatically by image processing by an internal microprocessor.

A core alignment method is used for the SM mode, DS mode and CS mode. A cladding alignment method is used for the MM mode. On the ED mode, it is possible to select the core alignment method or the cladding alignment method on the arc condition menu.

- Proper cleave length is 8mm-16mm for  $\phi$  0.25mm coated fiber, and 16mm only for  $\phi$  0.9mm coated fiber.

- There are three kinds of ambient environmental sensors that are built into the splicer: a pressure sensor, a thermometer and a hygrometer. Those sensors adjust the arc power in order to compensate for various of altitude/atmospheric pressure, temperature and humidity.

- The splicer is equipped with a built-in tube heater. Both 60mm and 40mm length splice protection sleeves are applicable. Using the menu commands, it is possible to switch to the appropriate protection sleeve length and to adjust heater time and temperature, if required.

- The splicer is powered by AC 100-240V 50-60Hz (Max. 3A) or DC 12V (Max. 6A).