DATA SHEET

FSM-100M

Specialty fibre fusion splicer

FEATURES

- Splices 80-500µm cladding fibre
- Patented split V-groove and electrode systems create flexibility within the Plasma Zone.
- Fibre profile learning – the splicer learns the fibre profile to shorten splice time.



TELECOMMUNICATIONS FIBRES	SMF(ITU-T G652), NZDSF(ITU-T G655), MMF(ITU-T G651), EDF, DCF and other specialty fibres
LARGE DIAMETER FIBRE	Conventional silica LDF
FIBRE CLAD DIAMETER	ϕ60µm to 500µm
FIBRE COATING DIAMETER	ϕ100µm to 2000µm
FIBRE COUNT	Single
CLEAVE LENGTH	Glass clamp: 8mm to 10mm (standard 9mm); Coating clamp: 3mm to 5mm (standard 4mm)
TYPICAL SPLICE LOSS	0.03dB [SMF], 0.05dB [NZDSF/LDF], 0.02db [MMF]
SPLICE TIME	15 sec. [SMF/MMF], 25 sec. [NZDSF/LDF]
RETURN LOSS	>> 60dB
SPLICE TIME	15 sec. [SMF/MMF], 25 sec. [NZDSF/LDF]
TUBE HEAT TIME	30 sec. [FP-03 40mm], 35 sec. [FP-03 60mm], 55 sec. [FPS01 series (micro sleeve)]
FIBRE CLAMP	It changes automatically according to cladding diameter and coating diameter
SWEEP RANGE	±5mm (arc centre is 0mm)
ELECTRODE LIFE	2500 arc discharges for SMF (ITU-T G.652) splicing with 1mm electrode gap
ELECTRODE GAP	1mm to 3mm (adjustable)
ELECTRODE OFFSET	-0.3mm to +0.1mm (adjustable)
PROOF TEST	1.96N to 2.45N
MAGNIFICATION	58 to 300 (changeable)
AUTO-START FUNCTION	Yes
SPLICE MODES	Total 300 modes including Standard, Manual, Power Meter and Attenuation modes)
TUBE HEATING MODES	100
SPLICE RESULT STORAGE	Last 2000 results stored in internal memory
LANGUAGE	English, Japanese, Chinese
FIBRE LEARNING FUNCTION	Yes
PC CONNECTION	Yes (for software upgrade, displaying image data, viewing splice results and conditions, and PC control)
DISPLAY	Dual 4.1-inch colour LCD monitors
DIMENSIONS	311mm [W] x 232mm [D] x 160mm [H] excluding rubber feet
WEIGHT	7.5kg
POWER SUPPLY	External AC adapter: ADC-15; Input: AC100 to 240V (50 to 60Hz) (max.100W AC)
OPERATING CONDITIONS	0 to 95% RH and 0°C to 40°C
STORAGE CONDITIONS	0 to 95% RH and -40°C to 80°C
TERMINALS	DC19 V 4.5 A power supply, USB 2.0 (Mini-B type) for PC communication, IEEE-488 24 pin for power monitor feedback alignment, two six-pin Mini-DIN connectors for external equipment (HJS-02)

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DATA SHEET

FSM-100M+

Specialty fibre fusion splicer

FEATURES

- Splices 80 – 1200µm cladding fibre and fibre with a cleave length of 3 – 26mm.
- Fibre Endview Observation System (EVS)
- Provides fibre shaping capabilities via Fibre Processing Software (FPS).



TELECOMMUNICATIONS FIBRES	SMF(ITU-T G652), NZDSF(ITU-T G655), MMF(ITU-T G651), EDF, DCF and other specialty fibres
LARGE DIAMETER FIBRE	Conventional silica LDF
FIBRE CLAD DIAMETER	ϕ60µm to 1200µm
FIBRE COATING DIAMETER	ϕ100µm to 2000µm
FIBRE COUNT	Single
CLEAVE LENGTH	Glass clamp: 8mm to 26mm (standard 9mm); Coating clamp: 3mm to 21mm (standard 4mm)
TYPICAL SPLICE LOSS	0.03dB [SMF], 0.05dB [NZDSF/LDF], 0.02db [MMF]
SPLICE TIME	15 sec. [SMF/MMF], 25 sec. [NZDSF/LDF]
RETURN LOSS	>> 60dB
TUBE HEAT TIME	30 sec. [FP-03 40mm], 324 to 45 sec. for FPS-series
SWEEP RANGE	±5mm (arc centre is 0mm)
ELECTRODE LIFE	2500 arc discharges for SMF (ITU-T G.652) splicing with 1mm electrode gap
PROOF TEST	1.96N to 2.45N
MAGNIFICATION	58 to 300 (changeable)
SPLICE MODES	Total 300 modes including Standard, Manual, Power Meter and Attenuation modes)
TUBE HEATING MODES	100
SPLICE RESULT STORAGE	Data from last 2000 results stored in internal memory, 100 images
LANGUAGE	English, Japanese, Chinese, French
DISPLAY	Dual 4.1-inch colour LCD monitors
DIMENSIONS	470mm [W] x 232mm [D] x 160mm [H] excluding rubber feet
WEIGHT	7.9kg
POWER SUPPLY	AC100-240 V (50/60 Hz) with AC adaptor ADC-15
OPERATING CONDITIONS	0 to 95% RH and 0°C to 40°C
STORAGE CONDITIONS	0 to 95% RH and -40°C to 80°C
TERMINALS	DC19 V 4.5 A power supply, USB 2.0 (Mini-B type) for PC communication, IEEE-488 24 pin for power monitor feedback alignment, two six-pin Mini-DIN connectors for external equipment (HJS-02)

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DATA SHEET

FSM-100P

Specialty fibre fusion splicer

FEATURES

- Rotational Z Stages – Polarization Maintaining Fibre (PMF) splicing
- New IPA2 Rotational Alignment algorithm including enhanced octagonal fibre, elliptical core fibre and multicore fibre alignment.
- Provides fibre shaping capabilities via Fibre Processing Software (FPS)



TELECOMMUNICATIONS FIBRES	SMF (ITU-T G652), NZDSF (ITU-T G655), MMF (ITU-T G651), EDF, DCF and other specialty fibres
LARGE DIAMETER FIBRE	Conventional silica LDF
PM FIBRE	PMF
FIBRE CLAD DIAMETER	ϕ60µm to 500µm
FIBRE COATING DIAMETER	ϕ100µm to 2000µm
FIBRE COUNT	Single
CLEAVE LENGTH	Glass clamp: 8mm to 10mm (standard 9mm); Coatimg clamp: 3mm to 5mm (standard 4mm)
TYPICAL SPLICE LOSS	0.03dB [SMF], 0.05dB [NZDSF/LDF], 0.02db [MMF], 0.06dB [PMF]
SPLICE TIME	15 sec. [SMF/MMF], 25 sec. [NZDSF/LDF], 35 to 50 sec. [PMF PANDA], 90 to 300 sec. [PM AUTO]
TYPICAL POLARISATION CROSSTALK	-40dB / 0.6° [PMF PANDA], -32dB / 1.4° [PM AUTO]
RETURN LOSS	>> 60dB
TUBE HEAT TIME	30 sec. [FP-03 40mm], 35 sec. [FP-03 60mm], 55 sec. [FPS01 series (micro sleeve)]
FIBRE CLAMP	changes automatically according to the cladding diameter and coating diameter
SWEEP RANGE	±5mm (arc centre is 0mm)
ELECTRODE LIFE	2500 arc discharges for SMF (ITU-T G.652) splicing with 1mm electrode gap
ELECTRODE GAP	1mm to 3mm (adjustable)
ELECTRODE OFFSET	-0.3mm to +0.1mm (adjustable)
PROOF TEST	1.96N to 2.45N
MAGNIFICATION	58 to 300 (changeable)
AUTO-START FUNCTION	Yes
SPLICE MODES	Total 300 modes including Standard, Manual, Power Meter and Attenuation modes)
TUBE HEATING MODES	100
SPLICE RESULT STORAGE	Data from last 2000 results stored in internal memory
LANGUAGE	English, Japanese, Chinese
ARC POWER CALIBRATION	Three methods
ARC POSITION CALIBRATION	Two methods
FIBRE LEARNING FUNCTION	Yes

PC CONNECTION	Yes (for software upgrade, displaying image data, viewing splice results and conditions, and PC control)
DISPLAY	Dual 4.1-inch colour LCD monitors
DIMENSIONS	311mm [W] x 232mm [D] x 160mm [H] excluding rubber feet
WEIGHT	7.5kg
POWER SUPPLY	External AC adapter: ADC-15; Input: AC100 to 240V (50 to 60Hz) (max.100W AC)
OPERATING CONDITIONS	0 to 95% RH and 0°C to 40°C
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TERMINALS	DC19 V 4.5 A power supply, USB 2.0 (Mini-B type) for PC communication, IEEE-488 24 pin for power monitor feedback alignment, two six-pin Mini-DIN connectors for external equipment (HJS-02)

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- Fibre Endview Observation System, with ability to rotationally align photonic crystal, non-circular & uniquely structured fibres.
- New IPA2 rotational alignment algorithm including: enhanced octagonal fibre, elliptical core fibre and multicore fibre alignment.
- Splices 80 – 1200µm cladding fibre



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PM FIBRE	PANDA and other PMF
FIBRE CLAD DIAMETER	ϕ60µm to 1200µm
FIBRE COATING DIAMETER	ϕ100µm to 2000µm
FIBRE COUNT	Single
CLEAVE LENGTH	Glass clamp: 8mm to 26mm (standard 9mm); Coating clamp: 3mm to 21mm (standard 4mm)
TYPICAL SPLICE LOSS	0.03dB [SMF], 0.05dB [NZDSF/LDF], 0.02db [MMF], 0.06dB [PMF]
SPLICE TIME	15 sec. [SMF/MMF], 25 sec. [NZDSF/LDF], 30 to 50 sec. [PANDA PMF], 70 to 300 sec. [non-PANDA PMF]
TYPICAL POLARISATION CROSSTALK	40dB/0.6° [PANDA PMF], -32dB/1.6° [non-PANDA PMF]
ENDVIEW OBSERVATION SYSTEM	With EndView mirror
RETURN LOSS	>> 60dB
TUBE HEAT TIME	30 sec. [FP-03 40mm], 324 to 45 sec. for FPS-series
SWEEP RANGE	±5mm (arc centre is 0mm)
ELECTRODE LIFE	2500 arc discharges for SMF (ITU-T G.652) splicing with 1mm electrode gap
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WEIGHT	9kg
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OPERATING CONDITIONS	0 to 95% RH and 0°C to 40°C
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TERMINALS	DC19 V 4.5 A power supply, USB 2.0 (Mini-B type) for PC communication, IEEE-488 24 pin for power monitor feedback alignment, two six-pin Mini-DIN connectors for external equipment (HJS-02)

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