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I2R Labs SMA905 Stainless Steel Fiber Connector

Precision Ferrule for Fiber-to-Spectrometer Coupling

The I2R Labs SMA905 Stainless Steel Fiber Connector is a high-precision ferrule designed to securely terminate fiber optic cables and interface them with spectrometers, light sources, or optical detectors using the SMA905 standard. Machined from corrosion-resistant stainless steel, this connector ensures stable optical alignment, low insertion loss, and durable performance in lab and field environments.

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Its robust threaded interface allows for repeatable coupling with SMA-compatible ports, making it a reliable choice for demanding spectroscopy and sensing setups.

Key Features:

SMA905 Standard Interface :

- Compatible with all major spectrometers and fiber-coupled light sources
- Secure threaded design for consistent and vibration-resistant coupling

Stainless Steel Construction :

- Built for long-term durability and corrosion resistance
- Ideal for harsh environments, including outdoor and industrial applications

Precision-Machined Ferrule :

- Supports standard fiber core diameters (e.g., 1.05 mm)
- Polished tip for minimal optical signal loss and reflection

Threaded Lock Nut Design :

- Allows easy assembly and firm locking into SMA female ports
- Ensures proper axial alignment of fiber with detector or source

Applications:

Spectrometer Input Coupling :

Terminate fiber optics and securely connect them to bench-top or handheld spectrometers

Fiber-Coupled Light Sources :

Interface output fibers with LED, laser, or halogen light modules

Optical Sensor Heads :

Assemble custom fiber-based probes with reliable SMA coupling

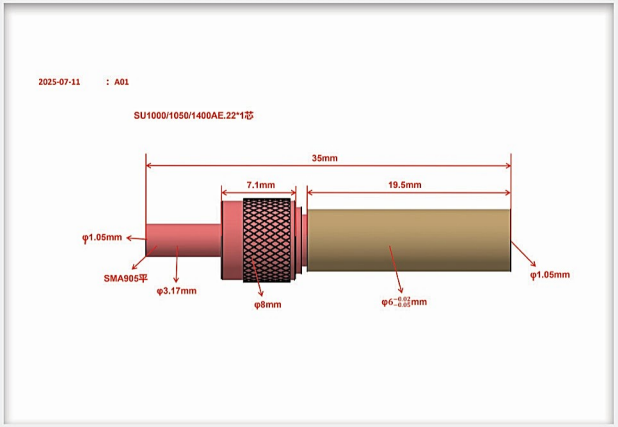
OEM & System Integrators :

Perfect for embedding into modular spectroscopy and diagnostic systems

Technical Specifications

Parameter Value / Description

- Connector Type SMA905 male (threaded)
- Material Stainless Steel (SS316/304)
- Core Diameter Supported φ1.05 mm (standard fiber optic core)
- Ferrule Diameter φ3.17 mm
- Outer Sleeve Precision machined to match SMA standards
- Polishing Flat-polished (custom angle available)
- Length Varies — typically 70–40 mm
- Application Range UV–VIS–NIR spectroscopy



Included

- SMA905 Stainless Steel Connector Ferrule
- Lock nut (integrated)
- Optional: Fiber polishing service / protective end caps

Align with Accuracy. Connect with Confidence.
Your reliable link between fiber and photonic hardware.

Why Choose i2r SMA905 Connectors?

- Built to exacting tolerances for repeatable performance
- Smooth coupling with standard SMA ports without wobble or misalignment
- Robust metal body for field-ready deployment
- Customization available for OEM batches or special assemblies