

# FTK01 & FMC2105-SA FTTR Fiber Termination Kit & Field Mountable Connector Datasheet 01

Building an Efficient Fiber Infrastructure.

## Overview

The FTK01 suite contains FTTR fiber termination tools (optical cable stripper, coating stripper, and fiber cutter), and needs to be used with a dedicated field mountable connector (FMC2105-SA). This product and solution does not require dedicated crimping tool or live device, facilitating onsite termination of optical fibers. FTK01 can be used to provide convenient, reliable, and elegant connection solutions for FTTx home connection, FTTR indoor optical networking, and ONU onsite installation scenarios.

## Features & Benefits

### User friendly

- Dedicated crimping tools and live devices, such as optical fiber fusion splicers, are not required.
- The one-time assembly success rate of skilled technicians is greater than or equal to 95%. Optical fibers can be terminated on site within three minutes.
- The FTK01 contains complete tools and is easy to carry. It needs to be used with an FMC2105-SA connector to implement precise fixed-length assembly.

### Unique design

- The FTK01 provides complete tools to ensure precise fixed-length stripping of fibers and reliable assembly of the FMC2105-SA connector. The FTK01 can be used together with an FMC2105-SA connector to terminate optical cables of 1.2 mm x 1.6 mm, 1.6 mm x 2 mm, and 2 mm x 3 mm onsite.
- An FMC2105-SA connector is compatible with standard SC adapters.

### Reliable performance

- Reusable: An FMC2105-SA connector can be re-assembled for five times.
- Long-term reliability: An FMC2105-SA connector passes the 500-hour accelerated aging test at 75°C/95% RH. The FTK01 has assembly times not less than 1000.
- Adaptability in extreme environments: In the real-time monitoring of optical indicators, the optical fiber connectors (FMC2105-SA) pass the temperature cycle test (12 cycles) at -40°C to +80°C, as well as the water immersion and salt spray tests.
- High security and environment-friendly: An FMC2105-SA connector and the FTK01 comply with RoHS and REACH certification standards.

# Structure

## Toolkit




Closed



Open



The FTK01 suite contains field mountable connectors and a whole set of three tools. The following table describes the tools.

| Tool  | Description   | Appearance   | Quantity |
|---|---|--|----------|
| 1. Optical cable stripper   | Used to strip the sheaths of 2 mm x 1.6 mm terminal flexible optical cables.  |  | 1 PCS    |
| 2. Coating stripper   | Used to accurately strip the coating of bare fibers by a fixed length (orange turntable can be used to fix cables of multiple types). |  | 2 PCS    |
| 3. Optical fiber cutter (including a case for storing cut optical fibers) | Used with the coating stripper to cut bare fibers to a fixed length.  |  | 1 PCS    |

## Optical Fiber Connector

SC/APC housing



Main body



Boot



Matching piece for 1.2 mm x 1.6 mm transparent optical cable






### NOTICE

The FMC2105-SA is not included in the FTK01, and needs to be purchased separately and used together with the FTK01.

## Specifications

### Specifications of Tools

| Model                                  | FTK01   |   |
|--|---|---|
| Matching optical cable dimensions (mm) | Transparent optical cable: 1.2 x 1.6 (Can only be stripped using diagonal pliers)       |  |
|  | Terminal flexible optical cable: 2 x 1.6 (Use FTK01 to strip)                           |  |
|  | Terminal flexible optical cable: 2 x 3 (Use the tool provided by the customer to strip) |  |

|   |                |
|---|----------------|
| <b>Toolkit dimensions (H x W x D, mm)</b> | 230 x 175 x 70 |
| <b>Toolkit weight (g)</b>                 | 530            |
| <b>Application environment</b>            | Indoor         |
| <b>Number of times tools can be used</b>  | ≥1000          |
| <b>RoHS and REACH</b>                     | Compliant      |

## Specifications of Optical Fiber Connectors

|   |  |
|---|--|
| <b>Model</b>                                  | <b>FMC2105-SA</b>  |
| <b>Connector type</b>                         | SC/APC   |
| <b>Matching optical cable dimensions (mm)</b> | Transparent optical cable: 1.2 x 1.6<br>Terminal flexible optical cable: 2 x 3 and 2 x 1.6 |
| <b>Connector dimensions (H x W x L, mm)</b>   | 9.5x 10 x 50   |
| <b>Application environment</b>                | Indoor   |
| <b>Insertion loss (dB)</b>                    | Average value: ≤ 0.25<br>Maximum value: ≤ 0.5  |
| <b>Return loss (dB)</b>                       | Minimum value: ≥ 50  |
| <b>Flame-retardant rating</b>                 | UL94-V0  |
| <b>RoHS and REACH</b>                         | Compliant  |


## Environment Specifications

|   |                |
|---|----------------|
| <b>Working temperature range of connector</b> | −40°C to +80°C |
| <b>Working temperature range of tools</b>     | −25°C to +50°C |
| <b>Storage temperature range of tools</b>     | −40°C to +70°C |
| <b>Working humidity</b>                       | ≤ 95% RH       |

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**Huawei Technologies Co., Ltd.**

Address: Huawei Industrial Base Bantian,  
Longgang Shenzhen 518129 People's  
Republic of China

Website: www.huawei.com