



# User's Manual

SUN-FI316

**Fiber Optic Identifier**

**English**

Table:SUN-UM-TE-FI001

Version:A/0

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# 1 Overview

SUN-FI316 Optical Fiber Identifier can quickly identify the direction of transmitted fiber and display the relative core power without interrupting the current service. The fiber identifier recognizes modulation like, 270Hz, 1kHz and 2kHz with continuous audible tone.

There are four adapter heads available: Ø0.25, Ø0.9, Ø2.0 and Ø3.0. The optical fiber identifier is powered by a 9V alkaline battery.

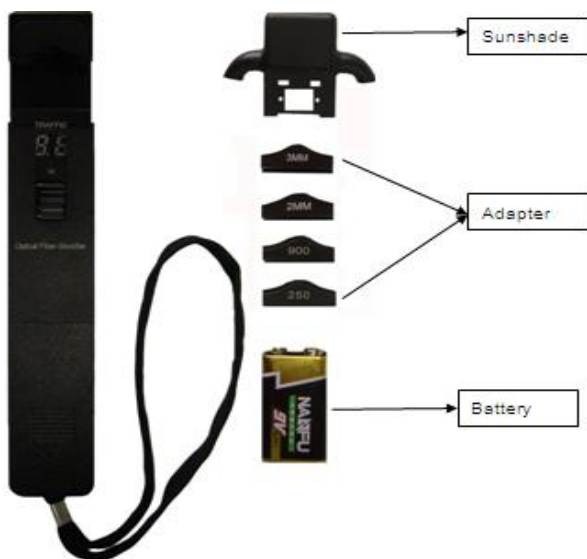
# 2 Technical Specifications

Type	Optical Fiber Identifier	
Identified Wavelength Range	800-1700 nm	
Identified Signal Type	CW, 270Hz±5%, 1kHz±5%, 2kHz±5%	
Detector Type	Ø1mm InGaAs 2pcs	
Adapter Type	Ø0.25 (Applicable for Bare Fiber)	
	Ø0.9 (Applicable for Ø0.9 Cable )	
	Ø2.0 (Applicable for Ø2.0 Cable )	
	Ø3.0 (Applicable for Ø3.0 Cable )	
Signal Direction	Left & Right LED	
Single Direction Test Range (dBm, CW/0.9mm bare fiber)	-46~10(1310nm)	
	-50~10(1550nm)	
Signal Power Test Range (dBm, CW/0.9mm bare fiber)	-50~+10	
Signal Frequency Display (Hz)	270, 1k, 2k	
Frequency Test Range (dBm, Average Value)	Ø0.9, Ø2.0, Ø3.0	-30~0 (270Hz,1KHz)
		-25~0 (2KHz)
	Ø0.25	-25~0 (1KHz,2KHz)
		-20~0 (2KHz)
Insertion Loss(dB, Typical Value)	0.8 (1310nm)	

	2.5 (1550nm)
Alkaline Battery(V)	9
Operating Temperature(°C)	-10—+60
Storage Temperature(°C)	-25—+70
Dimension (mm)	195X30X27
Weight (g)	230

### 3 Standard Accessories

Optical Fiber Identifier -----	1
Adaptor Heads-----	4
Battery -----	1
User Manual -----	1
Portable Bag-----	1
Sunshade-----	1



## 4 Function Description

### 4.1 Product Simple Figure



### 4.2 Features

- Portable, compact size and easy-to-use.
- Efficiently identify the traffic direction and frequency tone (270Hz, 1KHz, 2KHz) without any damage of the fibers.
- Core Power display of the tested fiber
- Low bending loss and high efficient output

- Easy to replace adaptors (Ø0.25, Ø0.9, Ø2.0, Ø3.0)

### 4.3 Function Description

1) Clamp

Clamp and hold the fiber in a suitable location.

2) Clamp Pushing Button

Push the button up and press downward to fix the adapter head.

Press the button again to loosen the adapter head.

3) LED indicator

The LED indicator to show the signal direction, modulation and battery level



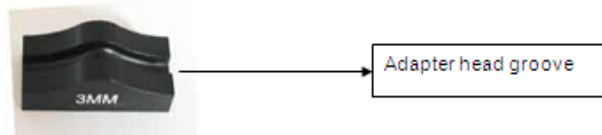
## 5 Use instructions

### 5.1 Selecting Adapter

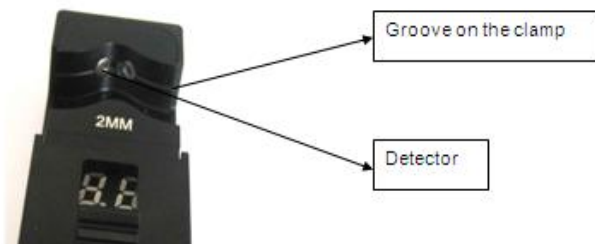
- 1) Select the appropriate adaptor head according to the different types of fiber



- 2) Insert the fiber to the adapter head when using the  $\text{Ø}2.0$  and  $\text{Ø}3.0$  connectors



- 3) Insert the fiber to the groove on the clamp when using the  $\text{Ø}900$  and  $\text{Ø}250$  connectors



## 5.2 Clamp and loosen

- 1) Please insert the fiber into the adapter head and then push the “clamp pushing button” up to clamp the fiber and test it



- 2) Please push forward slightly to loosen the adapter head



## 5.3 On/Off

- 1) Push up the “clamp pushing button” to turn on the unit
- 2) Loosen the “clamp pushing button” to turn off the unit





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## **5.4 Optical Fiber Identification**

- 1) Insert the fiber to the adapter head, push the button up to lock clamp and cover sunshade.
- 2) When optical signal passes the fiber, the LED illuminator will indicate the traffic's direction with intermittently audible tone and the relative core power will be also displayed in digital format.
- 3) If no optical signal passes the fiber, the LED illuminator is dead and the "LO" will be displayed in the relative core power position.
- 4) Fiber identifier can also detect the presence of 2KHz, 1KHz and 270Hz modulated tone with the continuously audible tone.

## **5.5 Battery Power Indication**

- 1) When the LED indicator is green, the battery power is full.
- 2) When the LED indicator is yellow green, then the power is low but the instrument can still work and test result is still reliable.
- 3) When the LED indicator is red, the power is too low and the instrument cannot work properly and you have to replace the battery.

## **6 Maintenance**

- 1) The fiber should be put in the groove according to the specific type.
- 2) Please use the cotton swabs to clean the detector surface regularly to keep it from dust.
- 3) Please take out the battery when it is not in use for a period of time.

## **7 Warranty and Service**

Caution: Repair it in the field is prohibited.

18 months warranty for Fiber Identifier.

Sun Telecom warranties that each of fiber identifier will be free from defects in material and workmanship for 18 months. This warranty covers the original user only and is not transferable. Should the device fail at any time during this



warranty period, Sun Telecom will, at its sole discretion, replace, and repair or refund the purchase price of the product.

This warranty is limited to defects in workmanship and materials and does not cover damage from accident, acts of God, neglect, contamination, misuse or abnormal conditions of operation or handling.

To establish original ownership and provide date of purchase, please complete and return the registration card to Sun Telecom. This warranty card will not go into effect until the warranty registration has been received by Sun Telecom.

A warranty registration card is included with the original shipment of equipment. Please take a few moments to fill out the card and mail or fax it to Sun Telecom to ensure proper initiation of your warranty term.

Return defective product. Please contact Sun Telecom for a written authorization. Failure to properly protect the product during shipping may avoid this warranty.

Sun Telecom will pay return transportation for products repaired or replace in warranty period. Before making a repair not covered the warranty, Sun Telecom will estimate cost and obtain authorization, then invoice for repair and return transportation. Sun Telecom reserves the right to charge for all testing and shipping costs incurred, if test results determine that the device is without defect

**SHANGHAI SUN TELECOMMUNICATION CO., LTD.**

Building No.145 Lane 666, Xianing Rd.  
Jinshan Industrial Zone, Jinshan District  
ShangHai, China 201506

TEL: +86 21 60138638      FAX: +86 21 60138635-401

Email: [ics@suntelecom.cn](mailto:ics@suntelecom.cn)

<http://www.suntelecom.cn>

