

# DIREKTRONIK

## POWER METER&LIGHT SOURCE TEST KIT



## I. INTRODUCTION

TC-800 Fiber Test Kit is designed for loss measurements over single-mode and multimode networks. Rugged palm-sized units are ideal for field use. It includes: TC-48 Power Meter and TC-68 Light Source.

**TC-48 Optical Power Meter** is a self-developed test instrument which is widely used for installation, operation and maintenance of fiber-optic network. TC-48 can test optical power within the range of 800~1700nm wave length. There are 850nm, 1300nm, 1310nm, 1490nm, 1550nm, 1625nm, six calibrated wavelength.

**TC-68 Optical Light Source** is a self-developed instrument, which features advanced control technology, high output, ultra low-power operation. It can work at 1550nm, 1490nm, 1310nm, 1300nm, 850NM, and single wavelength/dual-wavelength/ tri-wavelength. It can export a variety of modulation frequency (CW, 270HZ, 1KHZ, 2KHZ). It is widely used in optical communication, optical measurement, optical fiber sensing and so on.

## II. FEATURES

- Auto-off function
- Backlight LCD display
- User self-calibration function
- SC+ST+FC connectors are included
- High measurement accuracy and display resolution
- AAA batteries which is more convenient to carry



## III. PICTURES



**SC/FC/ST Adapters**



**Back Side**

## IV. SPECIFICATIONS

### TC-48 OPTICAL POWER METER



|                            |                                         |           |
|----------------------------|-----------------------------------------|-----------|
| <b>Sub Model</b>           |                                         |           |
| Measurement Range (dBm)    |                                         | -50 ~ +26 |
| Wavelength (nm)            | 800 ~ 1700nm                            |           |
| Detector                   | InGaAs                                  |           |
| Accuracy                   | <±3% (-10dBm, 22°C)                     |           |
| Calibrated Wavelength (nm) | 850, 1300, 1310, 1490, 1550, 1625       |           |
| Resolution                 | Linearity: 0.1%; Non-linearity: 0.01dBm |           |
| Optical Connector          | FC/SC/ST (FC-LC converter is optional)  |           |
| Power Supply               | Alkaline Battery (3pcs AAA batteries)   |           |
| Battery Operating Time     | >120h(without backlight)                |           |
| Operating Temperature (°C) | -10 ~ +50                               |           |
| Storage Temperature (°C)   | -20 ~ +70                               |           |
| Relative Humidity          | 0 to 90% (non-condensing)               |           |
| Dimension (mm)             | 130 X69 X29                             |           |
| Weight (g)                 | 160                                     |           |

### TC-68 OPTICAL LIGHT SOURCE



|                            |                           |  |  |
|----------------------------|---------------------------|--|--|
| <b>Sub Model</b>           |                           |  |  |
| Wavelength (nm)            | 1310/1550                 |  |  |
| Emitter Type               | FP-LD                     |  |  |
| Optical Connector          | FC/SC/ST                  |  |  |
| Output Power (dBm)         | ≥ -7dBm                   |  |  |
| Output Stability (dB)      | ±0.04@20°C@15min          |  |  |
| Modulation Frequencies     | CW, 270Hz, 1KHz, 2KHz     |  |  |
| Fiber Type                 | SM, MM                    |  |  |
| Power Supply               | AAA 1.5V (3pcs batteries) |  |  |
| Working Time (h)           | 40                        |  |  |
| Operating Temperature (°C) | -10 ~ +50                 |  |  |
| Storage Temperature (°C)   | -20 ~ +70                 |  |  |
| Dimension (mm)             | 125*65*29                 |  |  |
| Weight (g)                 | 160                       |  |  |



## V. PACKAGE



| NO. | ITEM                                             | QTY.  |
|-----|--------------------------------------------------|-------|
| 1   | TC-48 Optical Power Meter                        | 1 PCS |
| 2   | TC-68 Optical Light Source                       | 1 PCS |
| 3   | Carrying Bag                                     | 1 PCS |
| 4   | SC/FC/ST Adapters for TC-48 Optical Power Meter  | 1 SET |
| 5   | SC/FC/ST Adapters for TC-68 Optical Light Source | 1 SET |
| 6   | User Manual for TC-48 Optical Power Meter        | 1 PCS |
| 7   | User Manual for TC-68 Optical Light Source       | 1 PCS |
| 8   | AAA Dry Batteries                                | 6 PCS |

## VI. ORDERING INFORMATION

This Fiber Test Kit includes TC-48 Optical Power Meter and TC-68 Optical Light Source. Please kindly choose the proper sub-models that you need.

| SUB<br>MODEL | CONFIGURATION |
|--------------|---------------|
|--------------|---------------|

Item 20123307

| TC-800-BA | **TC-48B** Optical Power Meter(-50~+26dBm)+**TC-68A** Optical Light Source(1310/1550nm) |

