

## **TEKCN TC-105 XGPON Power Meter**

## Overview:

TEKCN TC-105 is a handheld instrument that integrates FTTx/PON optical power testing, suitable for the acceptance, opening and maintenance of EPON, GPON, and 10GPON (XGPON/XGSPON) networks.

With the coverage of 10G EPON and XGPON/XGSPON, there will be two wavelengths of optical signals at the same time in the downstream of FTTH: 1490nm and 1577nm, and Upstream wavelengths: 1310nm, 1270 nm. The traditional Power Meter can only measure the total downlink power and uplink power, which can no longer meet the needs of daily installation and maintenance personnel. TC-105 XGPON power meter can test the optical power of 1270/1310/1490/1577/1550nm at any position in the PON network at the same time. The test result of sub-wavelength is accurate, and it has a threshold setting function to determine the optical power in the optical fiber "pass/fail", Improve the network judgment time.

TEKCN TC-105 can also integrate the function of visual Fault Locator (VFL), which is multi-purpose in one device. High-definition color screen design, a variety of backlight options, adapt to work in a variety of light environments. With automatic shutdown mode, standby time can be set. Hand-held design, light weight, smaller size, long standby time, simple operation.

## **Highlights:**

- High-definition color LCD screen
- Sub-wavelength test of high isolation optical components
- Reference value can be set, with alarm function
- Multiple adapter configurations
- Store & adjust 999 Groups of test data
- Shutdown memory, multiple power supply options available
- Custom visual light source function
- Humanized backlight adjustment and automatic shutdown function



## **Technical Parameter:**

Model	TC-105				
XGPON Power Meter					
Wavelength	1270nm	1310nm	1490nm	1550nm	1577nm
Spectral Bandwidth(nm)	1260 ~ 1280	1300 ~ 1320	1480 ~ 1500	1540 ~ 1560	1570 ~ 1581
Optical Isolation (dB)	>30 @1310	>30 @1270	>40 @1270	>40 @1270	>40 @1270
Optical Isolation (dB)	>40 @1490	>40 @1490	>40 @1310	>40 @1310	>40 @1310
Optical Isolation (dB)	>40 @1550	>40 @1550	>35 @1550	>35 @1490	>40 @1490
Optical Isolation (dB)	>40 @1577	>40 @1577	>40 @1577	>30 @1577	>30 @1550
Test Range	-40 ~ +10	-40 ~ +10	-40 ~ +10	-50 ~ +20	-40~+10
Connector	FC/SC/ST 2.5mm universal connector PC (customized APC)				
Measurement Unit	dB/dBm/mW/uW/nW				
Display Resolution	0.01 dB				
Power Uncertainty	±0.5 dB				
Linearity	±0.1 dB /10 dB				
Channel Insertion Loss	<1.5 dB				
Data Storage	999 items				
Visual Fault Locator					
Output Power	10mW				
Connector	2.5mm universal connector + FC or SC				
Wavelength	650 ± 10 nm				
Internal Modulation	CW,2Hz				
General Parameters					
Working Temperature	-10 ~ +60 °C				
Storage Temperature	-25 ~ +70 °C				
Relative Humidity	0~80%				
Automatic Shutdown Time	5 ~ 90 min (adjustable)				
Power Supply	3*AA batteries (2000mAh rechargeable lithium battery optional)				
Continuous Working Time	working time > 36 h, standby time > 60 h <sup>®</sup>				
Dimension	76 mm * 177.5 mm * 40 mm				
Power Source	8.4V/1.5A <sup>②</sup>				
Weight	0.30 kg <sup>③</sup>				

Note: ① The continuous working time of the OPM when the rechargeable lithium battery is fully charged.

② When the rechargeable battery model is selected, the accessories include an 8.4V/1.5A power adapter.

<sup>3</sup> The Weight without battery.