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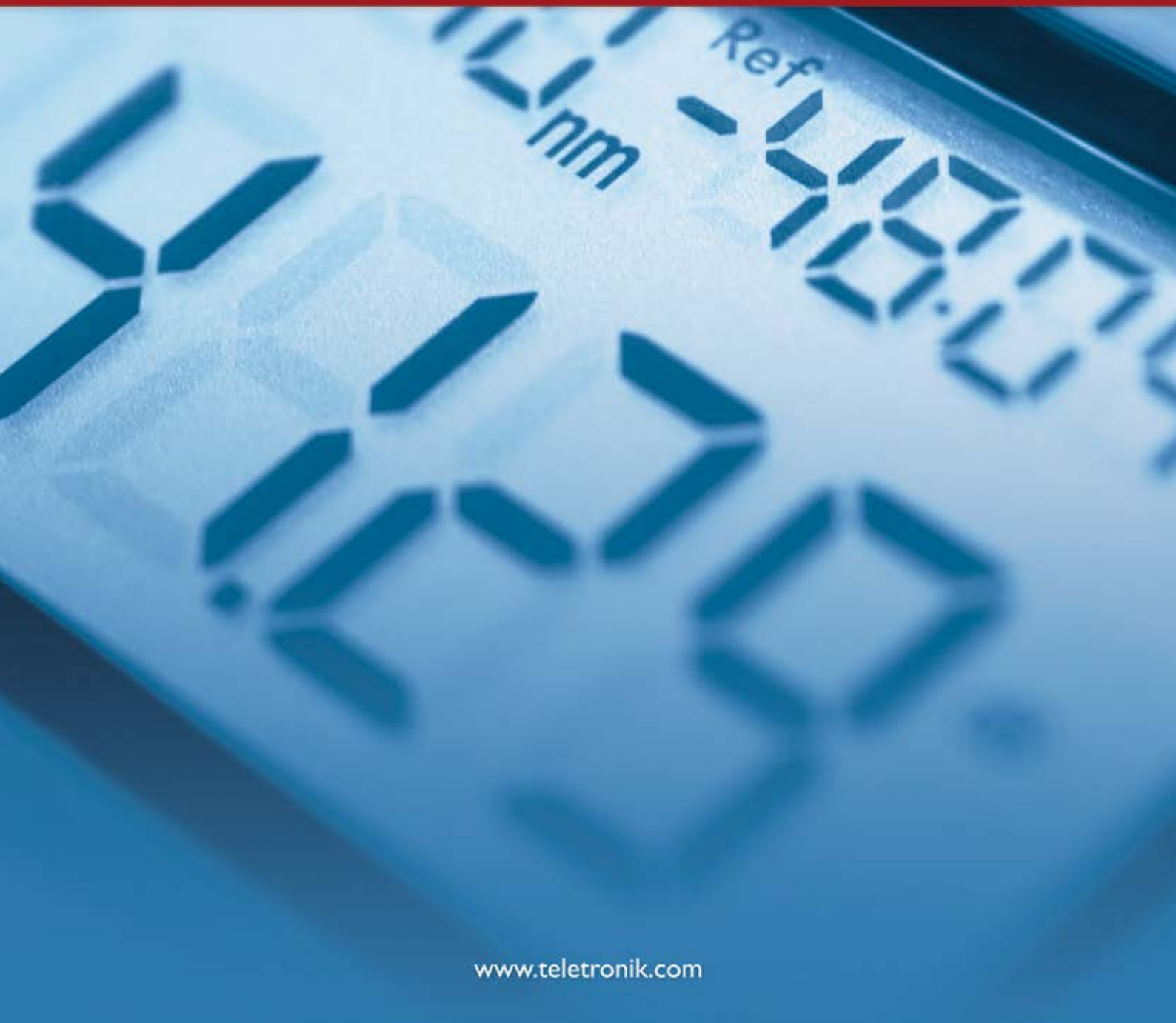
OPTICAL MEASURING INSTRUMENTS



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TOM 103

Optical Power Meter

- Wave ID - Auto wavelength identification & switching
- Frequency ID - Auto frequency identification
- Self-calibration function
- Reference power level can be set up and stored

Product overview

TOM103 Handheld Optical Power Meter is a newly designed fiber optic tester, which aims at the installation, engineering acceptance and maintenance of fiber network. Compared with other usual power meters, the TOM103 has more functions, like automatic wavelength identification, auto wavelength switching, intelligent backlight, data savage via USB port. Combined with TOM202 handheld optical light source, it offers a quick and accurate testing solution on both SM and MM fibers.

Technical specifications

TYPE	TOM103A	TOM103C
Calibrated Wavelength (nm)	850 / 1300 / 1310 / 1490 / 1550 / 1625	
Detector type	InGaAs	
Measurement Range (dBm)	-70 ... +10	-50 ... +30
Uncertainty (dB)	±0.1 (3.5%)	
linearity (dB)	±0.02	
Display resolution (dB)	0.01	
Frequency ID (Hz)	270, 330, 1K, 2K	
Wave ID (nm)	1310, 1490, 1550, 1625	
Data Storage Capacity	1000	
Communication Port	USB	
Connector	FC/SC/ST Interchangable	
Alkaline battery	3 x AA, 1.5V	
Power Adapter (V)	8.4	
Battery Operating time (h)	200 without backlight	
Operation Temperature (°C)	-10 ... +60	
Storage Temperature (°C)	-25 ... +70	
Dimension (mm)	190×100×50	
Weight (g)	370	

Standard configuration

TOM103 Optical Power Meter
3pcs 1.5V Batteries
Power Adaptor
User Manual
USB cable
Cotton Swabs
Soft Carrying Case
FC, SC, ST adapters

TOM 102

Optical Power Meter

- Self calibration function
- Power measurements in dBm or mW and insertion loss in dB
- Low battery consumption
- More than 240h continual operation

Product overview

TOM102 handheld optical power meter is a compact and an easy-to-use testing instrument for optical fiber networks which can be used for absolute optical power measurements as well as for relative loss measurements in optical fibers. TOM102 is a high performance-to-price ratio handheld testing instrument for the network maintenance.

- User adjustable 10 minutes auto-off function
- Comfortable LCD display with backlight for night operation

Technical specifications

TYPE	TOM102A	TOM102C
Wavelength range (nm)	800 ~ 1700	
Detector Type	InGaAs	
Measurement Range (dBm)	-70 ... +3	-50 ... +26
Uncertainty	±5%	
Calibrated Wavelength (nm)	850, 980, 1300, 1310, 1490, 1550	
Resolution	0.01dBm	
Operating Temperature (°C)	-10 ... +60	
Storage Temperature (°C)	-25 ... +70	
Auto-off Time (min)	10	
Battery Operating Time (h)	240	
Dimension (mm)	175×82×33	
Power Supply	alkaline battery (3xAA)	
Weight (g)	310	

Standard configuration

TOM102 Optical Power Meter
3pcs 1.5V Batteries
User Manual
Cotton Swabs
Soft Carrying Case
FC, SC, ST adapters

TOM 101

Mini Optical Power Meter

- Compact size designed for field operation
- Power measurements in dBm and mW.
- 10 minutes Auto-off function

Product overview

TOM101 mini handheld optical power meter is the most lightweight and compact testing instrument in it's class. Can be used for absolute power measurement for optical fibers. The simple layout guaranties short learning period. Use TOM101 in combination with TOM201 mini handheld light source and obtain a portable and wholesome testing pair.

- Adopts FC (interchangeable SC, ST) as well as 2.5mm universal connectors
- Double key design for easy working

Technical specifications

TYPE	TOM101A	TOM101B	TOM101C	TOM101D
Calibrated Wavelengths (nm)	850, 980, 1310, 1550			
Detector	InGaAs			
Measurement Range (dBm)	-60 ... +3	-50 ... +10	-40 ... +20	-30 ... +30
Uncertainty	±5%			
Resolution	0.01 dBm			
Operating Temperature (°C)	-10 ... +60			
Storage Temperature (°C)	-25 ... +70			
Auto-off Time (min)	10			
Battery Operating Time (h)	360			
Power Supply	alkaline battery (3xAA)			
Weight (g)	105			
Dimension (mm)	115×60×20			

Standard configuration

TOM101 Optical Power Meter
Alkaline battery
Instruction Manual
Cotton swabs
Protective Holster
FC, SC, ST adapters

TOM110P

PON Optical Power Meter

- Providing simultaneous measurement at all three
- wavelengths on the fiber (1490nm, 1550nm, 1310nm)
- 1000 measurements can be saved
- or transfered to PC with USB
- Self calibration function

Product overview

TOM110P is a new PON optical power meter which aims at the FTTx applications and maintenance. It can be used to test and estimate the signals of the voice, data and video at the same time. It is an essential and ideal tool for the construction and maintenance of the PON projects.

- 1310nm upstream measurement in burst mode
- TOM110P PON power meter offers up to 10 different threshold sets in total; Three status LEDs
- PON SC standard connector, easy to test
- Backlight LCD display supports night operation

Technical specifications

TYPE	TOM110 PON		
Wavelength	1310 upstream	1490 downstream	1550 downstream
Pass zone (nm)	1260 ~ 1360	1470 ~ 1505	1535 ~ 1570
Measurement Range (dBm)	-40 ... +10	-40 ... +12	-40 ... +25
Isolation1310nm (dB)		>40	>40
Isolation1490nm (dB)	>40		>40
Isolation1550nm (dB)	>40	>30	
Connatural Uncertainty (dB)	±0.5		
Linearity (dB)	±0.1		
Pass through insertion loss (dB)	<1.5		
Unit	dB/dBm/xW		
LCD display	128x64 px		
Resolution	0.01dB		
Optical Connector	Interchangable FC / SC / ST		
Input Power Range	DC 6.5V ~ 8.5V		
Rechargeable Battery	7.4V		
AC adaptor	8.4V		
Fiber Type	9/125μm		
Operating Temperature (°C)	-10 ... +60		
Storage Temperature (°C)	-25 ... +70		
Dimensions (mm)	210 x 115 x 55 (500g)		

Normal Optical Power Meter Module

Measurement Range (dBm)	-70 ~ +6 or -50~+26
Connatural Uncertainty (dB)	±0.25
Linearity (dB)	±0.1
Calibration Wavelength	850,1300,1310, 1490,1550,1625
Resolution (dB)	0,01
Optical Connector	FT / SC / ST
Fiber type	9/125μm

VFL Module

Output power	1mW
Wavelength	650nm
Optical connector	FC/2.5 universal connector

Standard configuration

TOM110P PON Power Meter
Soft carrying case
Rechargeable battery (3pcs 1.5V)
AC Adaptor, User Manual
Cotton Swabs, USB Cable, CD

TOM202

Optical Light Source

- Multi wavelength output
- Adjustable output power
- Tone generation, 270HZ, 330HZ, 1kHZ, 2kHZ
- Output power display
- Wave ID and frequency ID together with TOM103

Product overview

Handheld Adjustable Light Source is Teletronik's newly designed fiber optic tester, it aims at fiber network installation, fiber network engineering acceptance and fiber network maintenance. Combined usage with TOM103 handheld optical power meter offers a quick and accurate testing solution on both SM and MM fibers. The TOM202 provides 1 to 4 wavelengths and output power can be adjustable on customer requests.

- Adjustable output power
- User adjustable 10 minutes auto-off function

Technical specifications

TYPE	TOM202
Operating wavelengths (nm)	1310/1550; 1310/1490/1550/1625 (others specify on requests)
Applicable fiber	SM, MM
Laser type	FP-LD (others specify on requests)
Output Power (dBm)	-5 ~ -7
Adjustable Step (dBm)	< 0.5
Adjustable Range	≥5
Stability (dB, 30min, 20°C)	0.15
Modulation (Hz)	CW, 270, 330, 1K, 2K
Fiber Port	FC/PC
Alkaline Battery	3 x AA, 1.5V
Power Supply Adaptor (V)	8.4
Battery Operating time (h)	45 without backlight
Operation Temperature (°C)	-10 ... +60
Storage Temperature (°C)	-25 ... +70
Dimension (mm)	175 x 90 x 44.5
Weight (g)	231

Standard configuration

TOM202 Optical Light Source
3pcs 1.5V batteries
AC Adaptor
User Manual
Cotton swabs
Soft carrying case

TOM201

Mini Optical Light Source

- Economic type, easy to use
- 40 hours continuous operating time

Product overview

TOM201 is the most rugged small size instrument in the industry.
It integrates super small size and strong function in one unit.
With 3 pieces of 1.5V alkaline batteries, it can work continuously for more than 40 hours. The total weight is only 110g. Together with the TOM101 Mini optical power meter, it provides an excellent solution for fiber optic network and for field work.

- High stability output power
- Matched with the TOM201 mini power meter, it constitutes
- the smallest optical loss test kit
- Perfect for field testing

Technical specifications

TYPE	TOM201
Emitter Type	FP- LD
Wavelengths (nm)	1310 or 1550
Ouput Power (dBm)	-7 ~ -6
Output Stability (dB/20°C)	±0.05dB/15min ~ ±0.10dB/8h
Output Type	CW
Optical Connector	FC/PC
Power Supply	3pcs 1.5V AAA batteries
Operating Temperature (°C)	-10 ... +60
Storage Temperature (°C)	-25 ... +70
Battery operating time (h)	40
Dimension (mm)	115x60x20
Weight (g)	110

Standard configuration

TOM201 Optical Light Source
Alkaline battery
User Manual
Cotton swabs
Protective Holster

TOM210

Pen-type Visual Fault Locator

- Continuous and pulse operation
- Constant output power
- Laser case ground design prevents ESD damage

Product overview

TOM210 Pen-type VFL is an economical and efficent solution for field personnel for fiber tracing, fiber routing and continuity checking in optical networks.

- Finding the breakpoint, poor connections, bending or cracking in fiber optic cables
- Finding the faults of OTDR dead zone
- End to end visual fiber identification
- 2.5mm universal connector (1.25mm connector optional)
- Low battery warning
- Crash and dust-proof design for the laser head

Technical specifications

TYPE	TOM210
Central Wavelength	650nm ± 10nm
Emitter Type	FP-LD
Output Power	1mW, 3mW, 5mW, 10mW Optional
Optical Connector	2.5mm universal connector or 1.25mm connector, FC (Male)-LC (Female) convertor can be optional
Operating Model	Both CW and Pulse available
Pulse Frequency	2~3Hz
Power Supply	2pcs AA alkaline batteries
Battery Operating Time	60hours (1mW/650nm)
Operating Temperature (°C)	-10 ... +45
Storage Temperature (°C)	-40 ... +70
Dimension (mm)	Ø15x180
Weight (g)	120

Standard configuration

TOM210 Visual Fault Locator
2pcs Alkaline battery
User Manual
Cotton swabs
Soft Carrying case

TOM 301

Optical Multi Meter

- Automatic frequency identification
- Data storage and transfer to PC
- Insertion loss in dB, and power measurements in dBm or mW
- Adjusting of power meter functions and light source from menu

Product overview

TOM301 handheld optical multi meter integrates the functions of an intelligent optical power meter module and a highly stable light source module in one unit which can perform closed-loop tests by incorporating both modules. Manually adjustable Individual regimes.
A perfect combination to make your optical fiber tests a lot more convenient.

- Large LCD display
- High accuracy measurement, and wider measurement range
- Combines the function of power meter and light source

Technical specifications

TYPE		TOM301
Optical Power Meter Module	Detector Type	InGaAs
	Calibrated wavelengths(nm)	850, 980, 1300, 1310, 1490, 1550
	Measurement Range(dBm)	-70 ~ +6 or -50 ~ +26
	Resolution(dBm)	0.01
	Uncertainty(dB)	±5%
	Data Storage Capacity	240
	Identification Frequency Rang	10Hz ~ 60KHz
Optical Light Source Module	Emitter Type	FP- LD
	Wavelengths (nm)	1310/1550 (optional)
	Ouput Power (dBm)	-7
	Modulation Frequencies	270Hz, 1KHz, 2KHz
General Specifications	Power Supply	Rechargeable Battery + AC Adaptor
	Auto-off time	10 min
	Battery Operating Time	28 h(Only Power Meter is working) 6h (BothPowerMeter & Light Source are working)
	Communication Interface	RS 232
	Operating Temperature (°C)	-10 ... +60
	Dimension (mm)	210x115x55
	Weight (g)	540

Standard configuration

TOM301 Multimeter
Protective Rubber
Rechargeable battery
Power Supply Adaptor
Software Disk
Data upload Cable RS 232
User Manual
Cotton swabs

TOM 402

Fiber Ranger

- Portable, rugged, lightweight, easy to use
- Up to 8 fiber faults can be detected
- in each measurement
- Automatic Pulse Width Control to ensure
- a convenient operation
- Long battery life (up to 5000 measurements)

Product overview

TOM402 Optical Fiber Ranger is the most portable test instrument in the industry. It adopts the OTDR technical principles and integrates the powerful analysis software, which enables the TOM402 fiber ranger to detect fiber fault location easily and more accurate.

- Built-in visual fault locator (VFL)
- Traces faults in deadzone
- Testing the cable distance and identifying the faults location in the fiber link.
- Locates reflective and non-reflective breaks in the fiber network.
- Inspection of fiber, repair and maintenance.
- TOM402 Fiber Ranger is ideal to be used in FTTx network installation and
- maintenance.

Technical specifications

TYPE		TOM402
Operating Wavelength		1550±20nm LD
Fiber Type		9/125μm SM
Optical Connector Type		FC / PC
Detector Type		InGaAs
Max. Displaying Distance	Reflection Event	60km (≥1dB)
	Non-reflection Event	20km (≥2.5dB)
Reflection Event Dead Zone		15m
Measurement Unit		m
Distance Accuracy (Reflection Event)		±2 + 2x10^{-4} x distance (m)
Power Supply		3pcs AA alkaline battery
Battery Operating Time		≥5000 measurements
Temperature (°C)		Working: -5 ... +40 Storage: -10 ... +60
Humidity		0~85% (Non-condensation)
Weight (g)		450

Standard configuration

TOM402 Fiber Ranger
3pcs 1.5V batteries
User Manual
Cotton swabs
Soft carrying case

TOM401

Optical Fiber Identifier

- Digital displaying of relative output power
- Online testing
- Efficiently identifies the traffic direction and frequency tone (270Hz, 1KHz, 2KHz) without damageing of fibers
- Easy to use “One Key” design

Product overview

TOM401 Optical Fiber Identifier is an essential installation and maintenance instrument. By inserting the fiber into its adapter head, it can identify SM optical fibers without any damage by detecting the optical signals being transmitted through them so as to avoid the opening of the fiber at the splice point for identification and thus avoids the interruption of the service. In the presence of traffic, the intermittently audible tone is activated.

- Displays the core power of the fibers (-50~+10dBm)
- Low bending loss and highly efficient output
- Easy-to-replace adaptors (Ø0.25, Ø0.9, Ø2.0, Ø3.0 to match various optical cables)
- Mechanical damp design of adapter heads to ensure the fiber without damage.

Technical specifications

TYPE	TOM401
Identified Wavelength Range	800 - 1700nm
Identified Signal Type	CW, 270Hz ± 5%, 1kHz ± 5%, 2kHz ± 5%
Optical Power Reading (dBm)	-50~+10
Detector Type	1mm InGaAs 2pcs
Adapter Type (mm)	0.25 Applicable for Bare Fiber 0.9/2.0/3.0
Signal Direction	Left & Right LED
Power Display	LED
Signal Frequency	270Hz, 1KHz, 2KHz
Operating Temperature (°C)	-10 ... +60
Storage Temperature (°C)	-25 ... +70
Power Supply	Alkaline batteries (9V)
Dimension (mm)	195x30x27
Weight (g)	235

Standard configuration

TOM401 Optical Fiber Identifier
4pcs adapter heads
Alkaline battery
User Manual
Cotton swabs
Soft carrying case

For in depth information please visit our webpage

Für mehr Information bitte besuchen Sie unsere Webseite

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