



Small, Robust and Reliable,
The Ideal Tester for
Workshop and Production

Optimo 100

Cable Test

Backplane-/Racktest

Function Test

Specials

 **WEETECH**

The **Optimo 100** is a hand tester for the testing of electrical devices that have an optical interface according to the MOST specification and that communicate via the optical MOST bus. It is used for the testing of optical fibers (P.O.F.) and their terminal units in the automotive range and the measurement of optical signals between the components of the infotainment system in the passenger car.

■ Technical Data

Optoelectronics Receiver (RX)	· $P_{\text{receiv, repeat}}$:	-30 dBm – 0 dBm
	· $P_{\text{receiv, meas}}$:	-30 dBm – -6 dBm
	· Accuracy ($P_{\text{receiv, meas}}$):	± 0.6 dBm in the range of -20 dBm – -30 dBm
		± 0.3 dBm in the range of -8 dBm – -20 dBm
		± 0.5 dBm in the range of -6 dBm
	· Light preparation:	mode preparation through coupling filters
Optoelectronics Transmitter (TX)	· Parameter	condition value
	· Peak wavelength	$T_u = 25$ °C 640–660 nm
	· Cut-Off-frequency	100 MHz
	· Half width	10 nm
	· Adjustable transmitter power (P_{ave}):	$T_u = 25$ °C -6 > -30 dBm
		$T_u = 0... 50$ °C -8 > -30 dBm
	· Light preparation:	mode preparation through coupling filters: EMD
Attenuation	· Measuring range:	0 dB – 15 dB
LEAD-Test-DUAL	· Accuracy:	± 0.3 dBm in the range of 0 dB – 5 dB
		± 0.6 dBm in the range of 5 dB – 15 dB
	· Light preparation:	coupling filters at Tx and Rx (Tx with EMD)
■ Further Details		
Interfaces	· Interface optical: MOST connector 2+0 (Tyco AMP/Yazaki) Interface electrical: cupped female connector for external voltage Serial port RS232 9-pole (COM-Port)	
Microcontroller	· High Performance 16 Bit CPU, 8 MB Flash, Real-time-clock, Serial Port	
Display	· LCD, graphical, with background lighting (switchable), 128 x 64 dots, ca. 70 x 38 mm	
Power Supply	· Internal: 4x Mignon (type AA) 1.5 V or 4x batteries NiCd or NiMh (recommended capacity: 1.6 Ah) · External: Wall power supply, Input 100 - 240 Vac/0.5 A, Output 12 Vdc/1.3 A, Adapter for 12 V-vehicle network	
Environmental Conditions	· Operating temperature:	0... +50 °C
	· Storage temperature:	-20... +60 °C
	· Battery-charging temperature:	0... +35 °C
Protection Class at EN 60529	· IP43 (protecting caps and diagnostic connector installed)	
Standards	· Electromagnetic compatibility at EN61326-1 (electrical equipment for control technology and laboratory use) · Electrostatic discharge (ESD) at ISO TR 10605	

The output datas are denoted in dBm (0 dBm = 1 mW) and represent the signal average (p_{ave}).

The repeatable input power means the power range of the incoming signal, which can be carried to the transmitter and consequently leads to a running ring when inserting the Optimo 100 in the MOST ring.

The measurable input power defines the power range of the incoming signal, which can be evaluated at the power meter and leads to a valid indication of power (in dBm) on the display of the device.

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