

**Signal-Generator MS100HU**

**1 General**

With an appropriate LED adaptor the signal generator is used to determine the optical sensitivity or the function of an optical receiver (e.g. Photodiode). It can also be used for attenuation measurements on fiber optic links in combination with an optical power meter. The signal generator delivers a modulateable current at its output that drives the LED adaptor. On power up the generator is in default mode with 10mA output current without modulation. Several LED adaptors are available for different wavelengths and connector styles.

**2 Applications**

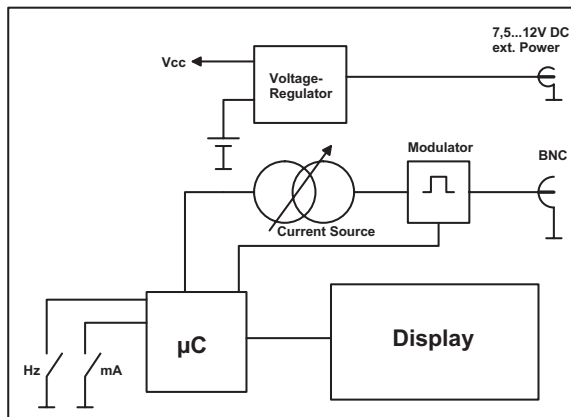
Favourable characteristics plus accurate coupling with all system adaptors on terminated optical cable enables a great number of applications:

- laboratory analysis
- installation inspections
- quality control
- testing of optical receivers
- attenuation readings on optical cable



Pic. 1

**3 Block Diagram**



**4 Features**

- Stabilized current source
- 1, 10, 20 kHz modulation frequency
- BNC-socket
- 9V battery powered or ext. power supply
- 25mm x 50mm LC-Display
- Plastic housing
- Easy handling

**5 Ordering Information**

Model	Part Number
Basic device (no adaptors)	909 MS 000 00 111

Appropriate adaptors for different connector styles and wavelengths must be ordered separately

**Note :**

Please refer to data sheets **T09 MS 660 SM 001** or **T09 MS 850 SM 001** for System Adaptors

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## 6 Operation

Please attach the required LED adaptor on BNC socket. Activate ON / OFF switch positioned on left top half of housing. By activating the measuring instrument the LC-Display shows DC as modulation frequency and 10mA diode forward current. By operating the keys [Hz] and [mA] on the top side of the measuring instrument the modulation frequency (Hz = DC/1kHz/10kHz/20kHz) as well as the diode forward current ( mA = 10mA/20mA/30mA/40mA) may be toggled.

Should the supply voltage of the block battery or the external power supply drop below 6 V, a warning will be displayed. If the supply voltage sinks below 4.7 V the device will switch off.

## 7 Maximum Ratings

Power supply +V	_____	+15V DC
Output Load	_____	min. 10 Ω
Storage temperature	_____	-20..+70°C
Operating temperature	_____	-10..+60°C

Stresses beyond those listed under 'Maximum Ratings' may cause permanent damage to the instrument. Above listed values are stress limits only and functional operation of the instrument at these conditions is not recommended. Exposure to maximum rating conditions for extended periods may affect the instrument reliability.

## 9 Technical Data

signal port:	adaptor, BNC for all common FO- connectors
current output:	selectable 10mA 20mA 30mA 40mA
current modulation:	selectable DC 1kHz 10kHz 20kHz
frequency error:	max. ±1,5%
current error:	max. ±1mA
temperature drift:	0,01%/°C
power supply:	9V block battery ( $t_{Life}$ appr. 2h) external 9V DC via 3,5mm socket
current consumption:	max. 55mA at $I_f = 40mA$
case:	plastic
dimensions:	appr. 128x70x26 mm (L x W x H)
protection class:	IP40
weight:	appr. 160g
temperature range:	-0 .. +50°C (operation)

## 10 Technical Drawing

