

# DOtech TypeU2/8



## Optical transmission system for analog signals

### General information

---

The measuring system can be used for optical digital transmission of analog signals at a resolution of 8 bit per channel and an analog bandwidth of 20 MHz. The system consists of a battery powered transmitter, combined filters and voltage dividers, a simplex optical fibre and a battery powered receiver. The transmitter is able to withstand the high fieldstrength commonly used at immunity tests in the automotive area in TEM-cells, stripline antennas and anechoic chambers. The measured signal is filtered, digitized and transmitted optically and potential free to the receiver where the analog voltage signal is recovered from the high speed digital signal and can be measured with a high impedance voltage measuring system, e.g. a digital storage Oscilloscope.

### Technical data

---

input channels:	2
resolution:	8 Bit each channel
data rate:	120 MS/s
analog Bandwidth:	DC to 20 Mhz (-3 dB)
input voltage range:	2 ranges: +/- 6 V and +/- 15 V, BNC connectors, other ranges with external voltage dividers
input impedance:	1 M $\Omega$ , 8 pF
output voltage:	+/- 6 V and +/- 15 V BNC connectors
output impedance:	150 $\Omega$
power supply:	internal 5 X NiMH cells, 4 Ah, operating time 6-7 h
housing:	L x W x H: 136 mm x 86 mm x 65 mm Weight: 800g
other:	optical fibre with FSMA connectors external filters (18 MHz, 1 MHz, 100 kHz and others) and voltage dividers

### Optical fibre

Type:	Simplex-Multimode- optical fibre 62,5/ 125 $\mu$ m or 100/ 140 $\mu$ m
Optical connectors:	FSMA