



# Kraus Messtechnik GmbH

Gewerbering 9, D-83624 Otterfing, ☎ +49-8024-48737, Fax. +49-8024-5532 – Germany  
Web: [www.kmt-gmbh.com](http://www.kmt-gmbh.com) E-mail: [info@kmt-gmbh.com](mailto:info@kmt-gmbh.com)



## TEL32/16/8

### 32 channel digital Telemetry system



- 32 channels (optional up to 128 channels)
- Analogue signal bandwidth 0 Hz-800 Hz/channel with 2.45 GHz transmitter
- 12 bit resolution
- Simultaneous sampling of all channel
- Anti- aliasing filters
- Distance up to 500m - more on request
- HF transmitter 2,45 GHz with 20mW or 433,9 MHz with 10mW
- Dimensions: Encoder 245x65x105 mm - weight 1.5 kg (without HF transmitter)  
Decoder 245x65x105 mm - weight 1.5 kg (without HF receiver)
- Power 10...30 V DC

**Encoder - TEL32-1.28 ENC**

- Analog input 32 channels +/-5V via 37pol sub-D connector  
"Optional expanded with master/slave up to 128 channels"
- Analog signal bandwidth see table
- Input impedance 100KΩ
- LED overload indicator
- Resolution 12 bit
- Amplitude dynamic 72 dB
- Signal to noise ratio 60 dB
- Simultan sampling of all channel
- Anti-aliasing filters low pass, 8. order Butterworth, 48dB/Octave cut off
- Linearity 0,2%,
- Output PCM, bitrate 40-320-1280 kbit/s, with additional NRZ and clock
- Optional:  
HF transmitter 2,45 GHz, 20mW with mod. bandwidth up to 1280 kbit/s - FM modulated or  
HF transmitter 433,9 MHz, 10mW, with mod. bandwidth up to 320 kbit/s FM modulated or  
HF transmitter 433,9 MHz, 10mW, with mod. bandwidth up to 40 kbit/s FM modulated
- Power 10-30 V DC, 8 Watt
- Dimensions Encoder 245x65x105 mm  
Weight 1.5 kg

**Decoder - TEL32-1.28 DEC**

- Input PCM, bitrate 40-320-1280 kbit/s, with additional NRZ and clock
- Optional:  
HF receiver 2,45 GHz, 20mW, mod. bandwidth 1280 kbit/s FM modulated or  
HF receiver 433,9 MHz, 10mW, mod. bandwidth 320 kbit/s FM modulated or  
HF receiver 433,9 MHz, 10mW, mod. bandwidth 40 kbit/s FM modulated
- Analog output 32 channels +/-5V via 37pol. sub-D connector
- Impedance 2Ω, max. 10mA
- Simultan out
- Resolution 12 bit, dynamic range 72 dB,
- 8. order Butterworth low pass filter for smoothing,
- Signal noise ratio 60 dB,
- Linearity 0,2%,
- Analog signal bandwidth see table
- Digital output for optional PCM Interface IF16
- Power 10...30 V DC, 8 Watt
- Dimensions Encoder 245x65x105 mm  
Weight 1.5 kg

Technical specifications are subject to change without notice!

### Max. analog Signal bandwidth of TEL32 Encoder / Decoder

Bitrate	Type of Transmitter / Receiver				No. of channels				
					8	16	32	64	128
<b>1280kBit</b>	GHz 2,45	20mW	1280kbit	Transmitter / Receiver	3,2kHz	1,6kHz	800Hz	400Hz	200Hz
<b>320kBit</b>	MHz 433	10mW	320kbit	Transmitter / Receiver	800Hz	400Hz	200Hz	100Hz	50Hz
<b>40kBit</b>	MHz 433	10mW	40kbit	Transmitter / Receiver "Low cost"	100Hz	50Hz	25Hz	12,5Hz	

