

# R16-PCM

## 16 Channel Telemetry for railway wheels Including signal conditioning for strain gages



- Full- and half bridge
- Auto Zero Offset calibration
- 4V bridge Excitation
- 16 bit resolution
- Simultaneous sampling
- Sampling rate 16x 8000Hz
- Signal bandwidth: 16 x 0-2000Hz
- Inductive power transfer
- Wireless digital data transmission
- Output analog +/- 10V
- Digital data interface to PC (option)
- Water waterproofed housing (IP65)

## R16-PCM - Technical Data:



### Encoder (Rotor Electronic)

### Decoder

Number of channels:	16 (up to 32 optional)	Number of channels:	16
Sensor support	Strain gages full and half bridge $\geq 120\Omega$	Analog Output	+/-10V via 37-Sub-D connector
Excitation	4V for all channels	Digital Output	PCM serial (optional PCM interface for PC)
Gain	250-500-1000-2000 (selectable by jumper)		
Offset calibration	Automatically (Auto Zero)		
Ant aliasing filter	7-pole Butterworth		
Band width	2000 Hz per channel	Band width	2000 Hz per channel
Sampling rate	8000 Hz per channel	Dynamic:	72dB
Resolution	16 bit ADC	DAC (digital to analog converting)	16 bit
Powering	Inductive	Powering	10-30V, 25 Watt
Data transmission	PCM digital infrared link	Data receiving	PCM digital twisted pair
Operating temperatures	-20 ... 80°C	Operating temperatures	-20 ... 70°C
RPM	Max. 3000		
Dimensions	100 diameter 130 Lengths (mm)	Dimensions	205 x 105 x 120 (mm)
Weight	2 kg	Weight	2.5 kg
Housing protection type	IP65	Housing protection type	IP54
Housing material	Aluminum anodized	Housing material	Aluminum anodized
Humidity	20...100%	Humidity	20 ... 80% (not condensing)
Shock	1000g	Shock	100g
Vibration	+/- 10g	Vibration	5g
Power/Data cable	Length up to 50m (between Encoder /Decoder)	System accuracy	$\pm 0.25\%$ (without sensor)

