

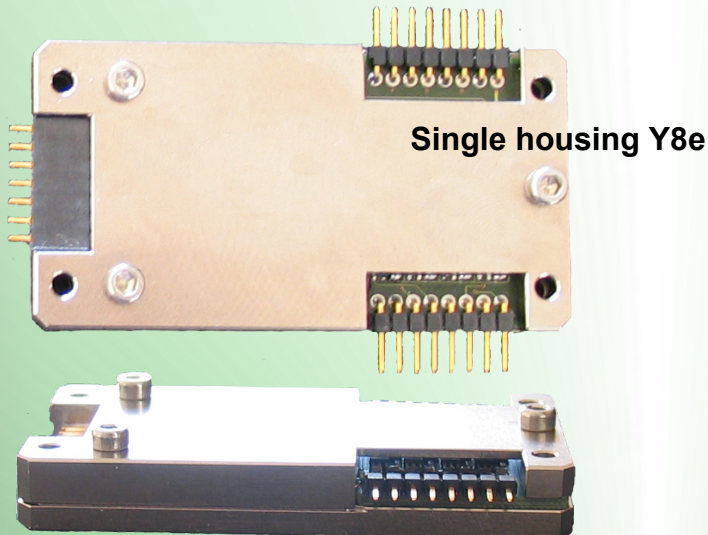
Multichannel-Telemetrysystems

Multichannel-Thermo-Telemetry

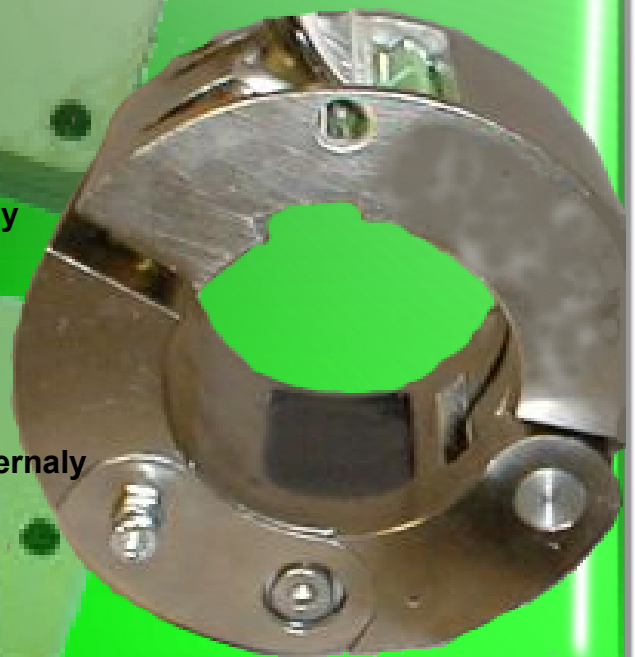
Y8 · Y4

RTM

Rainer Thomas Messtechnik

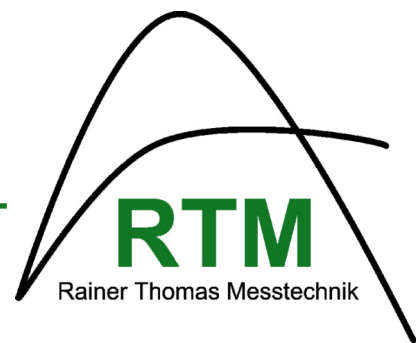


- small, robustly, dustproof and waterproof
- 8 / 4 Channels for Thermocouples- or Pt100-Measurement
- Dataoutput - Voltage, CAN or USB
- maintenance-free operation, by contactfree data transmission
- Rechargeable battery or inductive powersupply
- Online linearisation of sensor function
- Sensor break detection
- Cold junction compensation, internally or externally
- different housings of rotary part
- Use as a mobile measuring system or as an integrated solution in applications of Car industry, test bench technology and of the whole range of the mechanical engineering.



Clamp housing Y8r

Y8-K · Y8-Pt · Y4-K · Y4-Pt

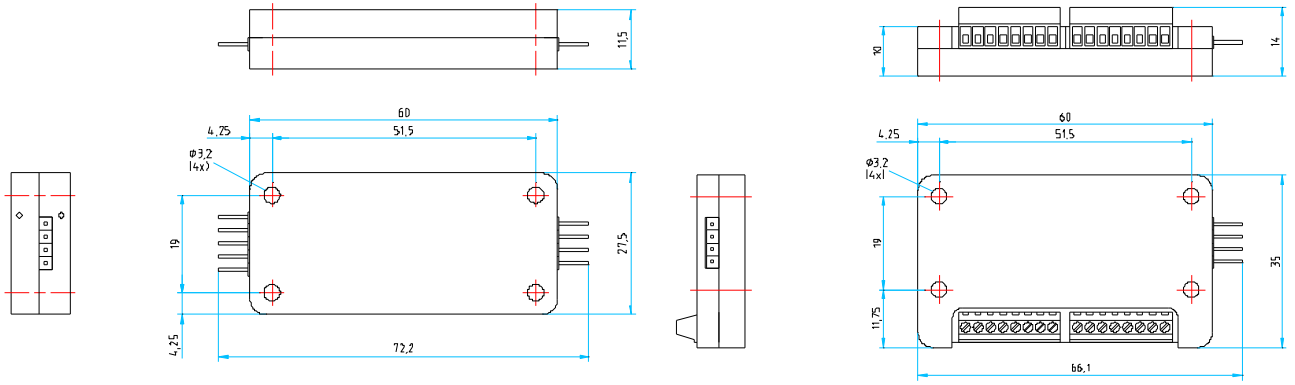


Technical Data

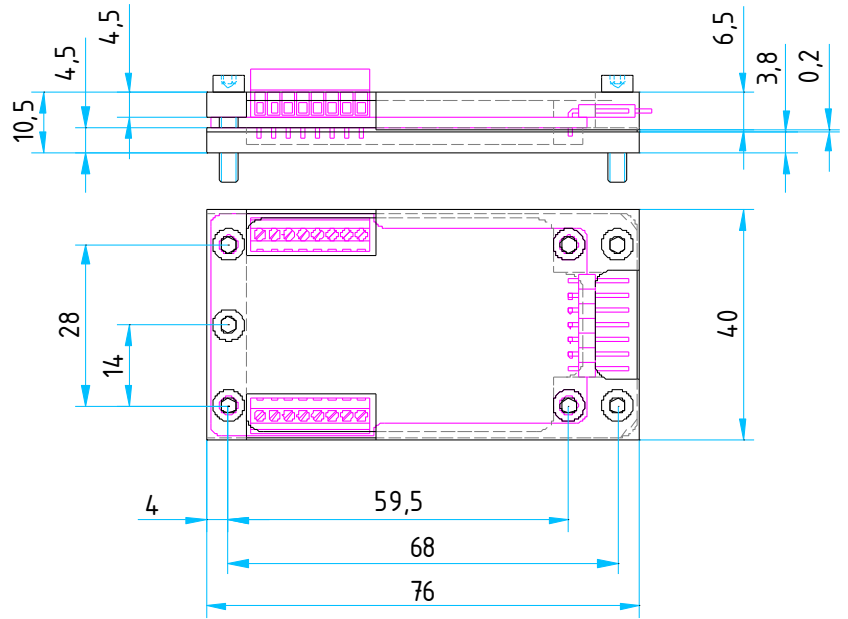
8- / 4-channel-Thermo-Telemetry	Y8e-K Y4e-K	Y8e-Pt Y4e-Pt	Y8d-K Y4d-K	Y8d-Pt Y4d-Pt	Y8r-K	Y8r-Pt
Mobile unit						
Mechanical data						
housing	robustly, nickel-plated aluminium case					
mechanical adaptation	4 holes for fixing with M3-screws			Clamping on shaft		
	Single housing		Double housing		Half shells with hinge	
weight; main dimensions	75g; 40 x 76 x 11 mm ³	50g; 35 x 60 x 10 mm ³ 35g; 25 x 60 x 10 mm ³		400g; Øa 74mm x 60mm Øi 30mm		
maximum rotations	according to installation and wave diameter; <6,000 / min			according of clamping		
protection	feasibly dust- and hose-waterproof					
operating temperature	0°C...85°C, Option Y-t -20°C...100°C, not condensed					
powersupply	DC 6...18V/180mW, Option Y-A battery unit Option Y-I inductive power supply			AA-battery (1,5V) integrated		
operating time	using Option Y-A about 70 h			4...6 h		
sensor connection	Screw clamps, solderpins or pins			Screw clamps		
data transfer	integrated RF-transmitter; 10.7MHz ; small power					
	Option Y-F	-	433MHz ISM-band, 10 mW		-	
signal inputs	8 or 4 differential amplifiers for direct connection of sensors					
configuration	work setting					
sensors thermocouple (also non-isolated) thermoresistor	Type K	-	Type K	-	Type K	-
	-	Pt100	-	Pt100	-	Pt100
integrated sensor supply	-	per channel current source	-	per channel current source	-	per channel current source
measurement range	-100...1.000°C or -100... 250°C	-100 ... 250°C	-100...1.000°C -100... 250°C	-100 ... 250°C	-100...1.000°C -100... 250°C	-100 ... 250°C
measuring exactness	+/-1°C; linearised; TC-could junction compensated					
signal bandwidth	10Hz / channel					
sampling rate	100Hz / channel					
antialiasing filter	butterworth, 6 pole					
control functions	negative full scale value (-1,0000°C, -250°C) thermocouple break					
Reproducer unit						
signal output	-analogously -digitally	per channel BNC-socket at frontplate, +/-10V, single ended 25 pole D-Sub socket at rear panel, bitparallel; optional CAN or USB				
monitor, display	3½ digit LED-display with switsch; synchronisation-LED					
RF-receiver/receiving antenna	integrated; 10.7MHz; receiving head					
	Option Y-F	-	433MHz/magnet foot antenna		-	
power supply	8... 32VDC, 3W					
dimensions (l x w x h); weight	robust compact housing 200mm x 105mm x 85mm; 1.2kg optional 19" / 3HE plugin module, 21TE (105mm); 1.2kg					
operating temperature	0°C...60°C					
Accessories						
cable; adapter; antenna	2m DC-supply cable; receiving head Y-E1 with connection cable					
Options / Special accessories	extended temperature range Y-t ; CAN-interface -C ; USB-interface -U ; factory calibration Y-WK					
	battery unit Y-A with charger; inductive power supply Y-I mwith inductive head Y-S2 or Y-S4 and installation material			-		
	-	Option Y-F 10 mW-RF-Link magnet foot antenna		-		

Mechanically dimensiones

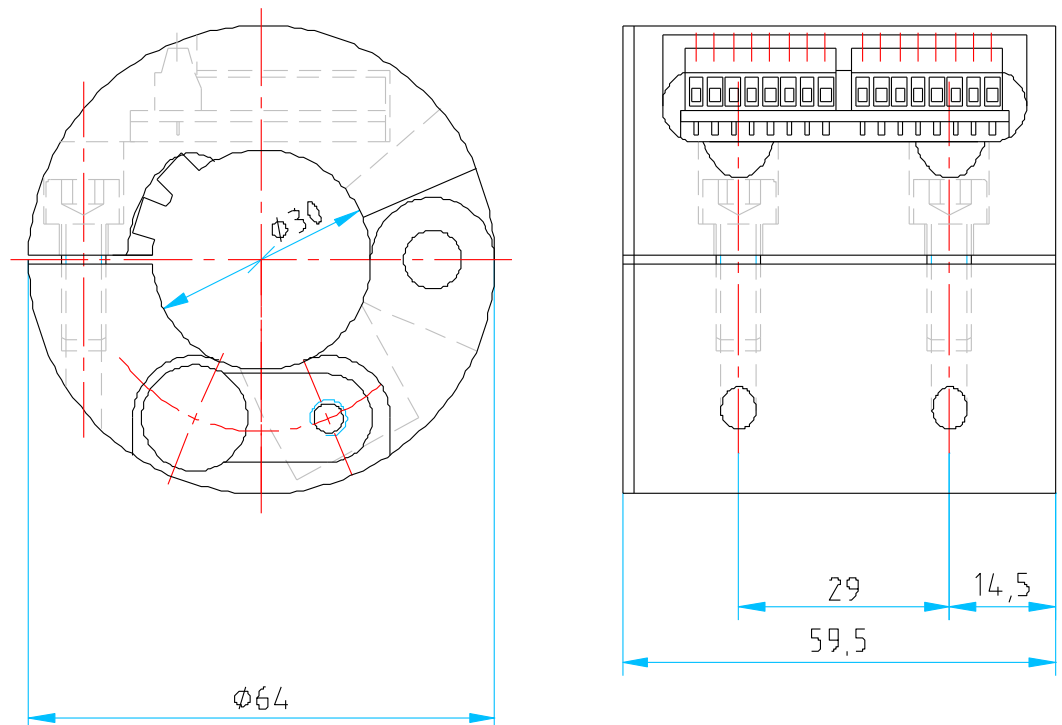
Double housing Y84d



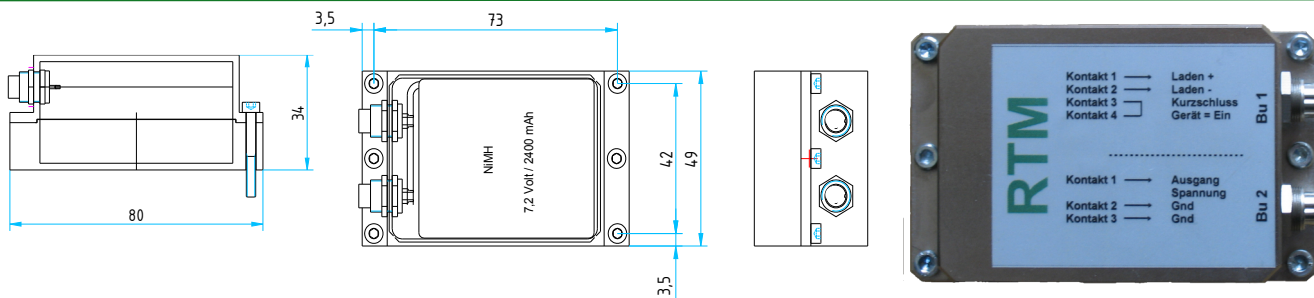
Single housing Y84e



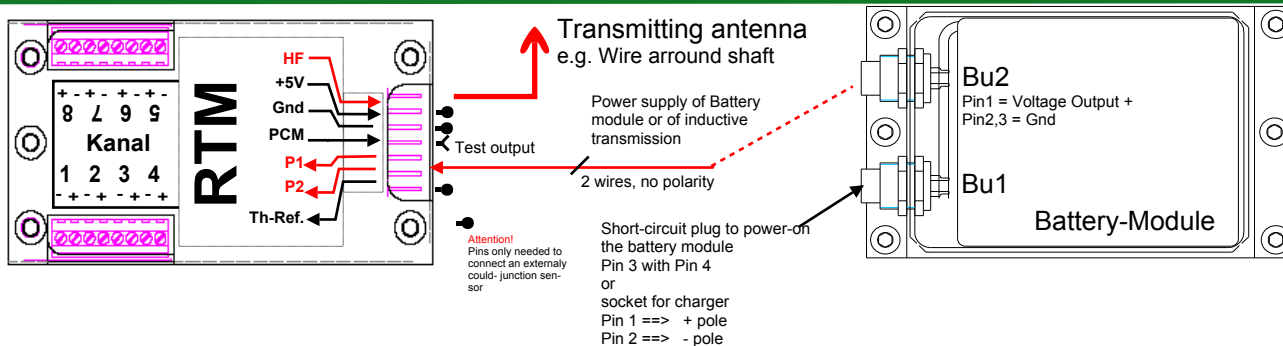
Clamping housing Y84r



Battery unit (rechargeable)



Connection diagram of mobile unit



Pinning connectors of reproducer unit

Data SubD-25 socket at rear plate			
Contact	Signal	Contact	Signal
1...12	DB15...DB04	16...19	AB07...AB04
13	PCM	20	WP
14	/SL	21	Gnd
15	FR	22...25	AB03...AB0

CAN SubD-9 socket at rear plate			
Contact	Signal	Contact	Signal
2	CAN-Low	7	CAN-High

8...32V DC	
Socket 3 pole at cable Type Binder 680 0306-00-03	
Kontakt	Signal
1	+ Versorgung
3	- Versorgung

Aux (reserved for special functions)	
Socket 4 pole at cable Type Binder 711 2 99-0080-00-04	

Delivery volume, Accessories, Options

Thermo-Telemetry Y8 or Y4 with reproducer unit

- Power cable
- Receiving or inductive head with cable
- Connector pins for Encoder unit
- 1,5m Teflon wire as transmitting antenna
- Documentation (CD)
- Transport suitcase



optional

- Battery unit **Y-A** with charger
- Inductive Power supply **Y-I**
- Interface CAN-Bus (Option **-C**)
- Interface USB (Option **-U**)
- Software Adjustment (Option **-AS**)
- Factory calibration (Option **-WK**)

(Pic. shows encoder unit Y8w)

Servicing hints, Recalibration cycle, CE-Conformity

Devices Y8/Y4 have no special service hints. Recalibration cycle is 2 years.

Design of devices Y8 / Y4 corresponds to EC guidelines: EN 300 220-3, EN 60 950, EN 301 489-01/-03
Devices were tested in typically situations.