

## Specification

# Multichannel Time Multiplex Transmitter dt3008T-T Flatpack

Parameter	Type / Value <sup>1</sup>	Dim	Comment
transmitter temperature range	-15 ... +125	°C	see appendix operating instructions see system specification
compensated temperature range	-25 ... +125	°C	
dimensions			
weight			
Transmitter supply			
type	AC		see also specification "U1 signal"
supply voltage	<div>U<sub>min</sub> 14 U<sub>opt</sub> 17 U<sub>max</sub> 20</div>	V <sub>pp</sub>	
current consumption	21 ±2	mA	
Sensor data			
number of measuring channels	8		
sensor type	K		
Signal input (measuring channels)			
measuring range			see system specification without damage of the transmitter
permissible overvoltage <sup>2</sup>	<div>U<sub>in,limit</sub> 60</div>	V	
input impedance	<div>R<sub>i</sub> 10</div>	MΩ	
coupling	DC		
sensor electrically connected to machine ground	allowed		
open sensor detection	yes		
Control signals			
U1 signal	<div>U1<sub>min.</sub> 6.0 +0.2 U1<sub>opt.</sub> 7.5 ±0.5 U1<sub>max.</sub> 9.0 -0.2</div>	V DC	amplitude equivalent to supply voltage
Ref signal			Amplitude equivalent to transmitter temperature full-scale corresponds to U <sub>in,max</sub> at the transmitter, respective U <sub>out,max</sub> / D <sub>out,max</sub> at the receiver; U <sub>out,max</sub> = 10 V; D <sub>out,max</sub> = 29760 digits
Cal signal	90 ±2	%f.s.	
RF Signal			
RF band			see system specification
output impedance	50	Ω	
Subcarrier			
frequency	165	kHz	
deviation	±10	%	

<sup>1</sup> All specifications are measured at room temperature unless otherwise stated.

<sup>2</sup> Up to 125 °C, with contact on both sides of the transmitter housing (large areas), with a metallic carrier mechanism.

In interest of constant product improvement, we reserve the right to change specifications without notice.

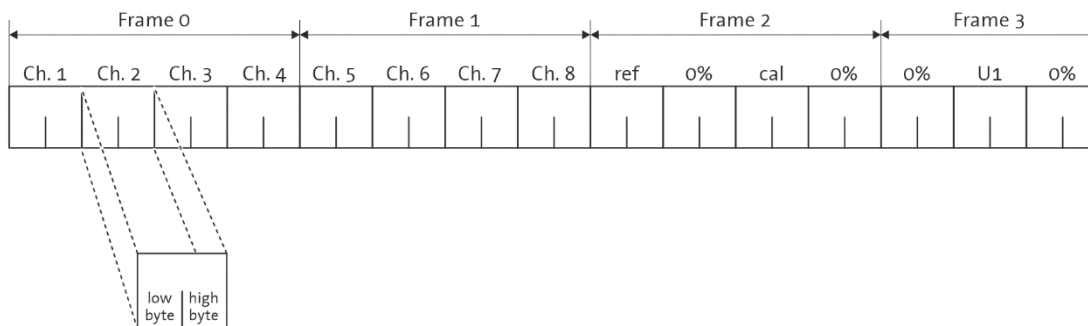
Telemetrie Elektronik GmbH  
Berliner Allee 42  
D-30855 Langenhagen

Phone: +49 (0) 511/97 83 96-0  
Fax: +49 (0) 511/97 83 96-16  
E-mail: info@datatel-telemetry.de

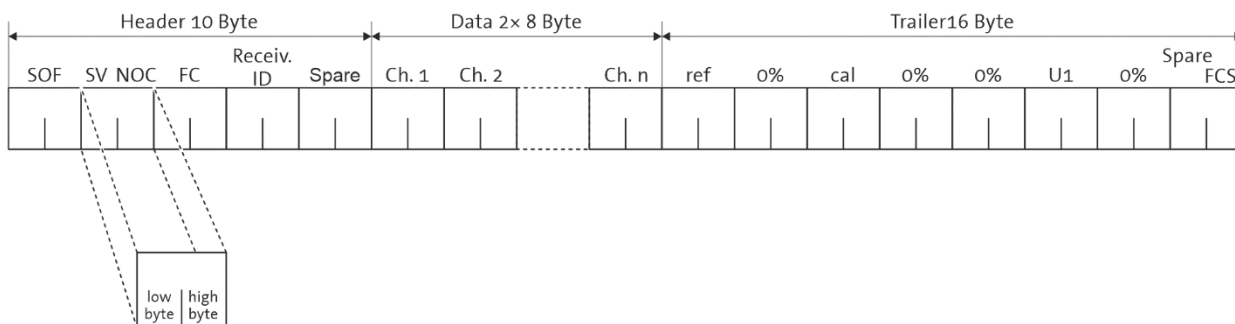
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Accuracy <sup>3</sup>			
junction error via transmitter temperature	≤ 2	°C	after calibration of the measuring channels
gain error over transmitter temperature	≤ 3	°C	
Ref signal	≤ 5	°C	without calibration of the "Ref" control signal
sampling rate per measuring channel	150	Hz	
variation of the sampling rate	±10	%	

### CAN data frame<sup>4</sup>



### RS232 data frame<sup>5</sup>



<sup>3</sup> Specification for the compensated temperature range of 25 ... 125 °C

<sup>4</sup> For the meanings of the abbreviations, see the "Operation" chapter

<sup>5</sup> For the meanings of the abbreviations, see the "Operation" chapter

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