

Specification

1-Channel Transmitter dt1001T-S

Parameter	Type / Value ¹	Dim	Comment
operating temperature range	-40 to +125	°C	
compensated temperature range	+25 to +125		
mechanical dimensions			see appendix operating instructions
weight			see system specification
Transmitter supply			
type	AC		
supply voltage	min. 14 opt. 17 max. 20	V _{pp}	
current consumption	20 ± 2	mA	with optimum supply, without sensor, with 50 Ω antenna
Sensor data			
sensor type	S/G full bridge		
sensor supply	constant voltage		
sensor supply voltage	U _{gage} 5000	mV	
sensor resistance	R _{gage} ≥ 350	Ω	
Signal input			
input voltage range	U _{in} ± 1 bis ± 50	mV	without overloading the measuring channel
overload input voltage	U _{in,limit} -2000 to +2000	mV	without damage of the transmitter
input impedance	R _i > 20	MΩ	
coupling	DC		
sensor connected to machine ground	not allowed		
open sensor detection	no		
Signal conditioning			
system gain	V _{min} 200 V _{max} 10000		U _{out} (receiver) / U _{in} (transmitter)
system constant measuring range	C _{sys} 32640	kΩ	calculated for U _{out} = ±10000 mV
RF signal			
RF-band			see system specification
output impedance	50	Ω	
Subcarrier			
frequency	100	kHz	
deviation		%	
Accuracy²			
zero drift versus transmitter temperature	typ. 1.2; max. 2	% f.s.	f.s.: full scale
sensitivity drift versus transmitter temperature	typ. 0.5; max. 1	%	
signal bandwidth	0 dB 0 to 10000	Hz	

¹ All specifications are measured at room temperature unless otherwise stated.

² Specification for compensated temperature range from 25 °C to 125 °C.

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

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