

# S-DIAS Transsonar Module TS 041/TS 051



with 4 (TS 041) or 5 (TS 051) Transsonar encoders

The S-DIAS TS 041 or TS 051 transsonar module can be used to analyze ultrasound distance recordings. The advantage lies in the contact and wear-free collection of measurement values with ultrasound.

## Transsonar Specifications

Number of channels	5 (TS 051) 4 (TS 041)	
Number of position encoders/channel	maximum 4	
Transonic encoder	ultrasonic encoder with start/stop function and RS422 interface (MTS EPS, Balluff BTL5, Balluff BTL6)	
Position encoder speed	manufacturer-dependent (vus*: ca. 2845 m/s for Balluff encoder). This value must be set for each position encoder!!	
Automatic sensor parameter recognition	for sensors with integrated protocols (= "expanded P-interface" with Balluff BTL 6 AT types with DPI/IP (BTL6-P111-.....) MTS EP start/stop sensor EPSxxxMDxxxR3)	
Measurement value (corresponds to the runtime)	0-1048575 (0-3.50 ms)	
Resolution	20 bits (corresponds to 9.48 µm at vus* = 2845 m/s)	
Gate time	3.33 ns	
Counter frequency	500 MHz	
Distance measuring (Example)	minimum: depends on the type of position sensor	maximum: runtime x vus (3.50 ms x 2845 m/s = 9.96 m)
Status LEDs	5	

## Electrical Requirements

		TS 041	
Voltage supply from S-DIAS bus		+24 V	
Current consumption on the S-DIAS bus (+24 V power supply)	typically	85 mA at 18 V	maximum 90 mA at 18 V
		65 mA at 24 V	70 mA at 24 V
		55 mA at 30 V	60 mA at 30 V
		TS 051	
Voltage supply from S-DIAS bus		+24 V	
Current consumption on the S-DIAS bus (+24 V power supply)	typically	90 mA at 18 V	maximum 95 mA at 18 V
		70 mA at 24 V	75 mA at 24 V
		60 mA at 30 V	65 mA at 30 V

## Article Number and Miscellaneous

Article number	20-053-041 20-053-051
Dimensions	12.5 x 104.2 x 72 mm (W x H x D)
Standard	UL 508 (E247993)
Approvals	UL, cUL, CE