

TT50 SPM & TS SPM-ION

Comparison Chart



Model	TorqueTrak 50 SPM	TS SPM-ION
Transmitter (Collar)		
Number of Channels	2	1
Sensor Input	350 Ω Wheatstone Bridge	350 Ω torque pattern
Sensor Connection	M8-4F circular threaded	
Battery Life	Up to 2 years – dependent on sample rate and channel use	2 years
Battery Type	3.6 V LI-SoCl ₂ A size (Tadiran TL-5920 or equivalent)	3.6 V LI-SoCl ₂ A size (Saft LS 17500 or equivalent)
Number of Batteries	8	10
Max Speed Sensing - Gyro	666 RPM	3000 RPM
Max Speed Sensing - Hall Effect	5000 RPM	None
Minimum Shaft Diameter	140 mm (5.5 in) 64 mm (2.5 in) with spacer	127 mm (5 in) 64 mm (2.5 in) with spacer
IP Rating	IP66	IP65
Stationary Receiver		
Supply Voltage	9-36 VDC	
Protocol	Modbus RTU RS485 TCP-IP/ 4 – 20 mA with Binsfeld TT50	Modbus RTU RS485
IP Rating	IP68	IP65
Compliance	CCS	DNV, CE
System		
Sample Rate	1, 300, 600, 1200, 2400 samples/sec (via BLE) 25 samples/sec (via Modbus RS-485)	4 samples/sec
ADC Resolution	24 bit	
Torque/Strain Accuracy	Input Range: Accuracy 0.125 mV/V: $\pm 2.00\%$ 0.25 mV/V: $\pm 1.00\%$ 0.5 mV/V: $\pm 0.50\%$ 1 mV/V: $\pm 0.25\%$ 2 mV/V: $\pm 0.13\%$ 4, 8, 16 mV/V: $\pm 0.10\%$	$\pm 0.1\%$
Reference Shunts	5 levels: 125, 250, 500, 1000, 1924 $\mu\text{V/V}$	None
RPM Accuracy	$\pm 2\%$	$\pm 1\%$