








Introduction to the Telemetry System

The telemetering system was developed for strain measurement of objects such as moving or rotating bodies, where wired measurements are not possible. The strain values are converted to digital form (A/D conversion) and transmitted

by the transmitter. Since the strain values are calibrated, no further calibration is required. On the receiver side, the received data is converted back to analog form (D/A conversion) and provides a calibrated voltage output.

Transmitter	Receiver	Feature
Telemeter Transmitter DT-221T 	 Telemetry receiver DT-281R DT-281R(-04)	<ul style="list-style-type: none"> • Uses 2.4GHz band for wireless bandwidth • High-speed sampling at 10 kHz (100 μs) • Voltage output range switchable among ±5000, ±10000, and ±25000 x 10⁻⁶ strain • DT-281R(-04) for steering force angle meter has three selectable voltage output ranges: ±500, ±1000, and ±2500 x 10⁻⁶ strain.
Steering Torque and Angle Transducer HLA-50B 		
Telemeter transmitter for shaft DT-223T 	 Telemetry receiver DT-281R-1	<ul style="list-style-type: none"> • Uses 2.4GHz band for wireless bandwidth • 5kHz (200μs) sampling • Sleep function installed • Voltage output range switchable among ±5000, ±10000, and ±25000 x 10⁻⁶ strain
Frictional Type Torque Sensor FGDH-4A 	 Dedicated telemetry receiver DT-282R	<ul style="list-style-type: none"> • No adhesion required due to the use of friction type gauges • Easily mounted on drive shaft for immediate measurement • Compatible with drive shafts of different diameters by replacing the spacer(φ20-30mm) • Uses a 2.4GHz low-power radio module with a long communication distance • The digital transmitter/receiver system is highly resistant to noise and requires no wiring work • Response frequency is 1kHz • Equipped with rechargeable battery • Power save function for long time measurement • Output voltage range switchable between ±3200, ±6400, and ±16000 x 10⁻⁶ strain • Can be used as a transmitting unit with 4-gauge method input