

Model 2000 Series Radio Telemetry System

無線遠距離監控系統



● 橋梁監控 ● 大樓監控 ● 地質結構監控 ● 火山監控 ● 土石流監控

產品特色

- ✦ 不需任何的傳輸線，最遠距離可達 10 公里。
- ✦ 可抗雜訊及電磁波干擾。
- ✦ 耐用於嚴苛環境。
- ✦ 內建訊號調節器。
- ✦ 最高可支援 32 Channels。
- ✦ 可從遠端的接收器上控制感測發射器傳送量測訊號。
- ✦ 可從遠端自動歸零。
- ✦ 可從遠端控制 Shunt 校正。
- ✦ 附有電池消耗顯示。



Various Model 2060D Transmitters shown with Model 3025 Eight-Slot Receiver Mainframe.

2060D 系列裝於待測物上的感測發射器可傳送任何的量測訊號，最遠可以傳送 4 英哩之遠的接收天線，天線間再以點對點接力的方式傳送訊號回遠端監控的接收器。發射器以美國 NEMA 4X 的規範作完整的防水保護，不怕室外風吹雨淋及日曬的長時間量測。

系統可選擇充電電池供電或是外部 DC 供電，數據可以 2.4G Hz 的頻寬傳輸，Sampling Rate 最快為 300 Hz/channel/second.

3024 接收器平台最高可支援 4 個 3022D-M4 的接收器模組，共 16 通道；3025 接收器平台則最高可支援 8 個 3022D-M4 的接受器模組，共 32 通道。每個獨立的通道都有提供類比訊號輸出。

Specifications

RECEIVERS: (ALL)

Power..... 115 / 230 VAC
 or 12 VDC
 Output..... ± 2 , ± 5 , ± 10 , 0-2, 0-5,
 0-10VDC, or 4-20mA
 Display..... 3½ Digit LCD
 Resolution..... 14 Bit
 Output Ripple..... < 2 mV (Filtered)
 < 15 mV (Wide Band)
 Data Sampling..... 300 S/s/Channel
 Integral Non-Linearity..... +/- .10%
 Repeatability..... +/- .05%
 Maximum Error..... <.25% Full Scale

TRANSMITTERS: (2060D, 2061D, 2063D)

Power Internal Rechargeable Battery
Pack or External 9 DC Volt Supply
 Modulation..... 2.4GHz Frequency Hopping
 Spread spectrum
 Carrier Frequency2400 to 2483 MHz
 RF Range:.....Up to 10 km
 RF Output..... 10,000 uV/M @ 3M
 Zero Drift0.02% / Deg C
 Span Drift0.02% / Deg C
 Size..... 4.92”H x 3.14”W x 2.24”L
 Operating Temp.-40 °C to 85 °C

Transmitters:

Model	Transmitter Type	Input	Excitation	Operating Temperature Range
2060D	Strain Gage	4 arm Wheatstone Bridge (>120 ohms)	5 Volts DC	-20 to 70 Deg C
2061D	Voltage	+/- 50 mV to 10 Volts Full Scale	5 Volts DC	-20 to 70 Deg C
2062D	Thermocouple	Type J or K Thermocouples (other types available upon request), Specify Measurement Range.	--	-20 to 70 Deg C
2063D	Acceleration	Compatible with most ICP type accelerometers	1mA constant current	-20 to 70 Deg C

Receivers:

Receiver Mainframes

Model	Max Channels (Module Slots)	Size	Power
3024	16 (4)	5.5”H x 10.25”W x 12.25”D	120 Volts AC 12 Volts DC
3025	32 (8)	5.5”H x 18.5”W x 12.25”D	120 Volts AC 12 Volts DC
3026D-16 ¹	16 (4)	5.5”H x 13.5”W x 12.25”D	120 Volts AC 12 Volts DC

Receiver/Status Modules

MODEL	DESCRIPTION
3023-M4	Receiver Module compatible with all 2060D Series Transmitters. 4-Channel
3022-4S	Status Module. One required for each Receiver Module. 4-Channel
3022	Receiver Module. Compatible with 2050B and 2060B Transmitters. 1-Channel

Both the 3024 and 3025 Receiver Mainframes will accept the Model 3022 and 3023-M4 Receiver Modules. The 3026D-16 is preconfigured with receiver modules to accept up to 16 inputs.

Due to the ATi policy of on-going development, specifications may change without notice. Any modification may affect the specification of our equipment.

- Remote Calibration Option:** Terminals provided on Strain Gage Transmitters for mounting shunt calibration resistor. Positive and Negative Calibration buttons on the front panel of the Receiver cause Transmitter's shunt calibration resistor to be connected to the appropriate leg of the bridge for 15 seconds.