



Introduction to T24 Wireless Data Acquisition System



- Exceptionally low power for performance in the field
- Up to 200m range (650ft with option to extend)
- High speed 200 updates per second
- High Resolution of 1 part in 400,000 (18bit) for accuracy



Ideal for a range of industry sectors & applications including:

- Construction, Civil Engineering, Lifting and Handling, Process Engineering, Silo & Weighing, Waste Management, Test & Measurement

Data Acquisition

At the core of the T24 range is the acquisition modules measuring the following inputs:

- Strain
- Voltage (0-10V)
- Current (4-20mA)

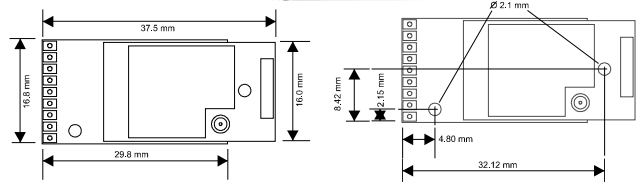
With exceptional low power consumption prolonging battery life in the field, the acquisition modules are the smallest telemetry PCBs that have been developed by us to date. Measuring 18x40x7mm the PCB is designed to be embedded into sensors but are also available fully cased. Enclosures provide field & screw terminals housed in a choice of IP54 & 65 enclosures with fitting for batteries.

Operating on license-free 2.4GHz frequency with a direct line of sight range of up to 200 metres (650ft) with option for active repeaters to double range and work around obstacles.

T24 is designed around its own transport protocol to deliver interference-free loss-less transmission in a busy bandwidth.

A battery charger of the same footprint as the acquisition module, with the addition of a VARTA LIP653450 battery, provides a complete miniature powered acquisition module.

T24-SA Strain Gauge Acquisition Module for OEM



T24-ACMI Industrial Connectivity module allowing easy connection
 Left shows integration with a load cell



A choice of three portable display handheld units allow data to be viewed on 2 segment 8 digit displays. Function options are:-

- One to one data capture
- Up to 12 inputs captured with scroll and summing
- Unlimited input capture

All perform sleep and wake functions on the acquisition modules to prolong battery life between uses. Robust and water-proofed to IP65 NEMA 4.

A serial output allows connection to a printer or serial display or for feeding directly into a PC or PLC.

An analogue output module provides configurable analog outputs of 0-10V 4-20mA, 0-20mA, ±10V, ±5V.

Relay module provides mains power switching to operate switch claxon siren, flashing beacon, control valve etc.

Software & Base Stations

Supported by base stations interfacing with either USB, RS232 or RS485, the T24 system is configured via the T24 Toolkit.

A user friendly software tool, the tool kit is used to configure all the devices within the radio telemetry range. In addition, the tool-kit offers basic logging to excel and RF monitoring.

DLL's are provided for users to write/create their own custom software applications in Visual Basic.



T24-BsU & T24-BSi USB/Industrial Base Station

Screenshot of T24 Toolkit software

Product Order Codes

T24-SAi/e	Strain Gauge Acquisition Module internal antenna/external antenna	T24-BSu	Base Station USB
T24-VAi/e	Voltage Acquisition Module internal antenna/external antenna	T24-BSi	Base Station Industrial USB, RS232/485
T24-IAi/e	Current Acquisition Module internal antenna/ external antenna	T24-SO	Serial Output
T24-Safi/e	'Fast' Strain Gauge Acquisition Module internal antenna/external antenna	T24-AO1	Analogue Output
T24-HS	Handheld Reader 1 to 1	T24-PR1	Thermal Printer
T24-HA	Handheld Reader 1 to 12	T24-RM1	Relay Module
T24-HR	Handheld Reader Unlimited inputs	T24-AR	Active Repeater
SERIALDIS	6 digit 7 segment LED 20mm display	T24-ACM	Enclosure with mains & battery powering
		T24-ACMi	Enclosure for integration & battery powering AA cells
		T24-ACMm	Enclosure Miniature
		T24-BB1	Battery pack for ACMm Enclosure

CE, Complies with EMC directive. 2004/108/EC
The Radio Equipment and Telecommunications Terminal Equipment (R&TTE) Directive, 1999/5/EC.



In the interests of continued product development, *Applied Measurements* Limited reserves the right to alter product specifications without prior notice.