

# **T24** WIRELESS TELEMETRY SENSOR SYSTEM

# MADE TO MEASURE

## LATEST UPGRADES

- ▶ New integrated radio module and antenna for superior performance and coverage in challenging environments
- ▶ Free logging and visualisation software to display and build visual representations of systems with live readings. With audible alarms, reports, logging and built-in webserver for data on the go
- ▶ Wireless transmission range up to 800 m (half a mile)
- ▶ Improved product security for increased system isolation



**THE T24 WIRELESS  
TELEMETRY SENSOR  
SYSTEM IS A MODULAR  
WIRELESS SOLUTION  
FOR INDUSTRIAL  
SENSOR APPLICATIONS**

High accuracy, high quality measurement is interfaced with simple yet powerful configuration and monitoring software. T24 gives sensor manufacturers and integrators the complete

flexibility to build their own sensor modules around it. The system easily replaces wired systems, reducing installation and maintenance costs.

### MEASURES

Load, Strain, Pressure, Torque, Pulse, Temperature, Potentiometer & other 4-20 mA / 0-10 V Conditioned Sensors

### INDUSTRIES

Process/Industrial Weighing, Construction, Automotive, Aerospace, Energy & more

**mantracourt**  
Advanced Intelligent Instrumentation  
[mantracourt.com/t24](http://mantracourt.com/t24)

# MADE FOR SIMPLICITY

## A WIRELESS MODULAR SYSTEM

### TRANSMITTERS

#### SENSOR INPUTS



LOAD, PRESSURE, TORQUE, STRAIN, TEMPERATURE, PULSE, POTENTIOMETER, PH, FLOW, VIBRATION, HUMIDITY, DEPTH, INCLINOMETER

#### SENSOR TRANSMITTERS



OEM



TRANSMITTER  
MODULES

T24 transmitter modules collect data from industrial sensors including load, pressure, torque, strain, temperature, pulse, potentiometer & 4–20 mA / 0–10 V conditioned sensors. OEM PCB transmitters also available for integrated solutions.

#### TRANSMITTERS



WIND SPEED  
TRANSMITTER

### RECEIVERS

#### INTERFACES



MODBUS  
GATEWAY



BASE  
STATIONS



ASCII SERIAL  
OUTPUT



PC



PRINTER



DISPLAY

#### FREE SOFTWARE



TOOLKIT  
SOFTWARE



VISUALISATION  
SOFTWARE

#### DISPLAYS

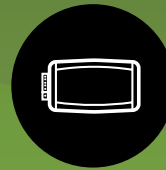


HAND-HELD  
DISPLAYS



LED  
DISPLAY

#### OUTPUT



ANALOGUE  
OUTPUT



RELAY  
OUTPUT



PRINTER



TRANSMIT  
TO MOBILE

#### ACCESSORIES

BATTERY PACK  
ANTENNA OPTIONS  
BATTERY CHARGER  
REPEATER (extend range by further 400 m)



SERVERS &  
MOBILE DEVICES

## T24 PROVIDES

- Exceptional performance in the harshest of conditions
- High measurement low noise electronics
- Long battery life of up to five years in the field
- Proprietary license free 2.4 GHz
- Intuitive software which calibrates to sensors in under three minutes

### MODULAR SYSTEM

We know how industry applications can vary, so T24 can be constructed to fit around each requirement. Transmitter modules, base stations, robust handheld displays, serial outputs, relays, printers and analogue outputs can be simply configured to suit your needs.

### MEASUREMENT QUALITY

High accuracy, low noise measurement electronics deliver high resolution, low drift results which can be user calibrated over nine points to enable linearization and to deliver results in user definable engineering units. The results can be transmitted at rates of up to 200 per second to other T24 devices.

### POWERFUL SOFTWARE

Configuration of devices is simple with our user friendly Toolkit software. Configure and calibrate by using either known inputs or by table entry.

### RANGE & COVERAGE

T24 modules are fitted with efficient antennas which provide superior performance and data integrity. The antenna's signal integrity and coverage overcomes challenging environmental conditions such as moving objects or high metallic environments. The license free 2.4 GHz Direct Sequence Spread Spectrum (DSSS) radio technology offers high integrity, error free communications which can co-exist with other wireless technologies such as Wi-Fi, Bluetooth® and Zigbee®.

### T24 INDUSTRY EXAMPLES

#### Construction

- Monitoring tension and compression on shoring struts
- Crane/underhook scales

#### Waste Management

- Bin weighing

#### Marine

- Tension measurement on mooring lines

#### Energy

- Pressure sensing in gravity fed power station
- Strain measurement on wind turbine blades

#### Automotive

- Torque measurement on rotating shaft
- Weight distribution on high performance vehicles

#### Oil & Gas

- Monitoring dynamic stresses on umbilical cords

## LATEST UPGRADES

### SMARTER DIAGNOSTICS & IMPROVED SECURITY

Our more powerful version of the T24 Toolkit provides improved monitoring of the channels as well as the ability to check radio link quality, execute commands, view and alter parameters. New functionality in the Toolkit gives the ability to assign transmitters with security keys.

### INCREASED SIGNAL STRENGTH & COVERAGE

T24 modules are fitted with efficient internal antennas to overcome challenging environmental conditions such as moving objects or high metallic environments.

### TRANSMISSION RANGE OF 800 M

With improved signal integrity, T24 can transmit data up to 800 m (half a mile) which far exceeds the range achieved by other systems found on the market today.

**"We are very pleased with the T24 functionality. Our customers find the software easy to use, fully functional and being laptop based makes it all easy."**

Larry Jackson, Jackson Scales

## WHY WIRELESS?

- Save time and cost compared to installing a similar wired system
- Ideal for temporary applications and reusable
- The ability to place transmitters in hard to reach locations without the cost and logistics of cabling
- Maximum flexibility to respond to all types of industry applications
- Low maintenance costs with reliable data collection for many years

## T24 PRODUCTS



TRANSMITTERS



INTERFACES



DISPLAYS



OUTPUT MODULES



**FREE  
SOFTWARE**

## MADE FOR VISIBILITY

### FREE DATA LOGGING AND VISUALISATION SOFTWARE

Our Logging and Visualisation Software logs up to 100 channels and builds visual mapping displays. Audible alarms can indicate under and over range as well as loss in communications, reports, low battery and error reports. Built in web server provides a summary view page to other computers, tablets, iPads and smart phones etc. using a standard browser.

## MADE BY MANTRACOURT



### AMPLIFY YOUR PERFORMANCE

Mantracourt Electronics is a leader in high precision measurement electronics. Since 1974, we have been supplying innovative solutions to a wide variety of industry sectors including the lifting/crane markets, construction and process weighing.

As a key technology supplier to leading international OEM's for over 40 years, we pride ourselves on exceptional reliability, performance and support. Our expertise in strain gauge and load cell signal conditioners covers innovative wireless telemetry techniques, high performance analogue to digital converters, ATEX (hazardous areas) and communication protocols including Modbus, CAN and ASCII.

### OUR CORE STRENGTHS

- Dedicated design and manufacturing
- Highly reliable, extremely rugged products
- In-house manufacture giving flexible and fast product delivery times
- High density surface mount capability for miniature products
- Full technical lifetime support of products
- Large stock holding of our standard products

## CONTACT US TO FIND OUT MORE

Contact your local representative to see how T24 could save you time, cost and have your sensors wirelessly enabled.

Contact your local representative:

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BRITISH

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