



**ME**mantracourt  
Advanced Intelligent Instrumentation



# Product Guide

Manufacturing Performance and Precision since 1974

# BRING MEASUREMENT BACK TO LIFE

WITH THE  
UPDATED



**T24** WIRELESS TELEMETRY  
SENSOR SYSTEM

## How to Weigh a T.REX...

### ▼ GET IT RIGHT FIRST TIME

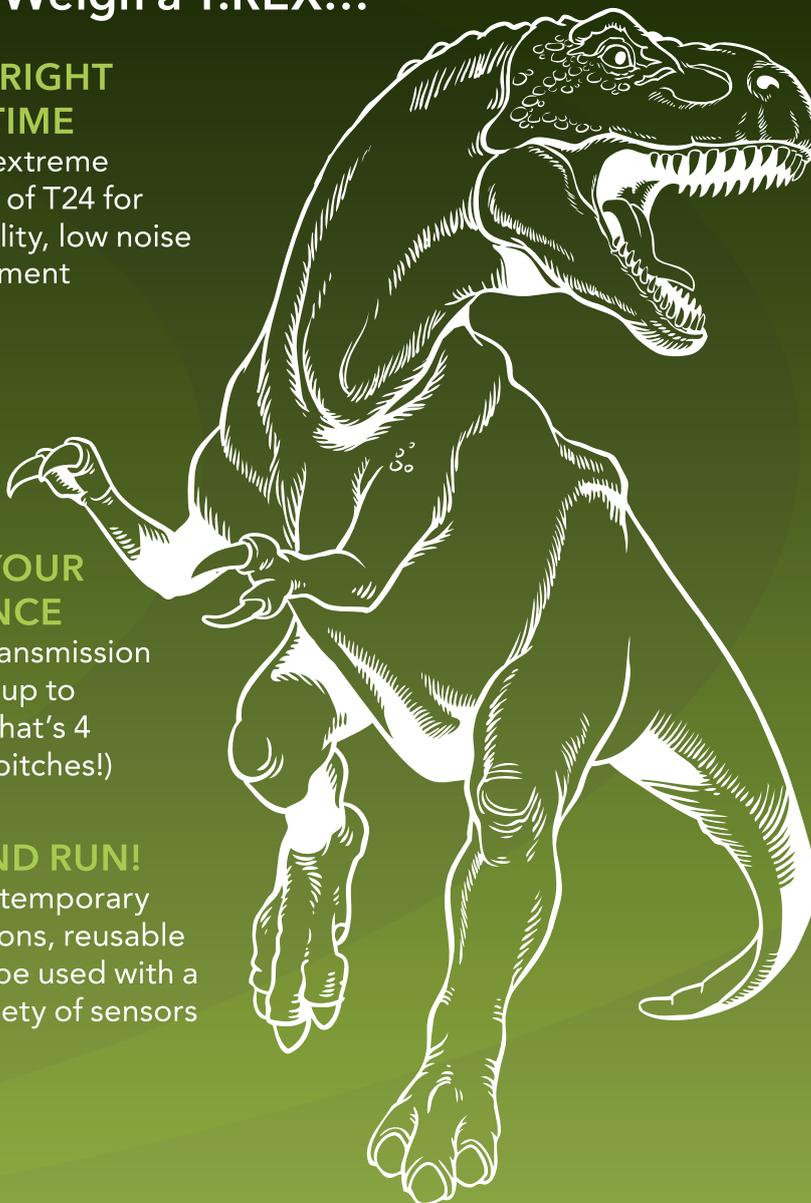
Use the extreme accuracy of T24 for high quality, low noise measurement

### ▼ KEEP YOUR DISTANCE

With a transmission range of up to 800 m (that's 4 football pitches!)

### ▼ USE AND RUN!

Ideal for temporary applications, reusable and can be used with a wide variety of sensors



### ▼ DON'T HANG AROUND!

With our powerful user-friendly logging & toolkit software which calibrates and configures in under 3 mins

### ▼ PLACE SENSORS IN HARD TO REACH LOCATIONS

...with a very long stick!  
Without the cost and logistics of cabling



### ▼ MINIMUM RETURN VISITS

With exceptional performance, reliable data collection and low maintenance costs for many years, in the harshest of conditions

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# About Us



## About Us

Mantracourt Electronics Ltd was founded in 1974 with the clear objective of becoming a leader in the application of microelectronics to many sectors of industrial measurement. Based near Exeter in the South-West of England, we are an established technology provider to many major OEM sensor manufacturers with an international distribution network spanning over 30 countries.



Our instrumentation is designed for load cells, strain gauges, pressure sensors, torque transducers, flow sensors and temperature sensors. We specialise in signal conditioning, display and control using analogue, digital or radio wireless telemetry techniques.

## Our Expertise

- Specialists in strain gauge and load cell signal conditioners
- Wireless radio telemetry
- High performance analogue to digital converters
- Fieldbus areas, including: Modbus, ASCII and CAN
- Hazardous area (ATEX)



## Our Core Strengths

- Dedicated design and manufacturing
- Highly reliable, extremely rugged products
- In-house manufacture giving flexible & 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



## We Make What We Sell

Almost without exception, we are both the designer and manufacturer of the products we offer. So, when you talk to us, you are talking to the people who know the products completely. Our team of design and development engineers and technicians are supported by a fully equipped laboratory including specialist EMC and RF test equipment that is used in the design and development process. Our products are manufactured to relevant CE, FCC, ATEX, IC, ETSI standards.



# About Us

## In House Manufacture

We operate our own automated state of the art Surface Mount production line centred on Yamaha iPulse M10 and M20 machines. This ensures fast response and superb quality.

All boards are inspected 100% with an Automatic Optical Inspection (AOI) machine. This ensures all parts have been correctly placed and soldered.

All products are fully tested, we use Automatic Testing Equipment (ATE) to ensure excellent product quality.

We hold ISO9001:2008 certification and manufacture ATEX approved & RoHS compliant products.



## UK Based Technical Support

Our technical support engineers are on hand to advise and guide users through the simplest to most complex installation and maintenance queries. In parallel, our network of trained Technical Partners located in all corners of the globe provide technical support in local time.



## Inventory and Fast Turnaround

We hold safety stocks of key components as well as finished product and aim to ship our standard product range within 1-2 days. Many products can be shipped the same day.



## International Distribution

Mantracourt products can be purchased throughout the world via our global network of Technical Partners who are able to assist with product selection and technical support.



## Contact Us

We will guide you through the best purchasing method.

For information, please visit [mantracourt.com](http://mantracourt.com)

Tel: +44 (0)1395 232020

Email: [sales@mantracourt.com](mailto:sales@mantracourt.com)

# Product Groups



## T24 - Wireless Telemetry

Wirelessly transmits a wide range of sensor outputs up to 800 m (2,600 ft), or further using range extender (T24-AR) and receive using a range of base stations, handhelds, displays and other outputs. Excellent battery life of up to 5 years and high accuracy measurement.



## ICA - Miniature Analogue In Cell Amplifiers

A range of miniature strain gauge amplifiers for fitting inside load cells and sensors converting them to a standard analogue output. Enabling use of long cables and direct connection to PLC's, data loggers and displays.



## PSD - Handheld Strain Gauge Displays

Portable strain gauge indicators combine extremely high resolution and low power with the convenience of a handheld display and keypad. The 7 digit LCD display has peak and valley hold facilities with the option of a RS232 data port.



## DSCUSB - Load Cell & Strain Gauge to USB Converter

The DSCUSB USB strain gauge converter is a compact, high performance strain gauge digital signal conditioner with a USB output.



## DSC - Load Cell & Strain Gauge to Data Converters

Digital load cell converter for strain gauge sensors such as pressure transducers, load cells and torque sensors allowing direct connection to PLC's, dataloggers & displays. DCell is a miniature version for direct fitting inside the sensor.



## LC - Load Cell Amplifiers, Displays, Digital Converters & Controllers

LCA, LCB digital load cell amplifiers, SMW weighing indicators and controllers, SMP indicator for temperature, speed and potentiometer. All with analogue, relay and data outputs.



## SGA & LVDT - Analogue Strain Gauge Amplifiers & LVDT's

Strain gauge amplifiers are high performing signal conditioners for use with single or multiple strain gauge bridge sensors such as load, pressure and torque sensors with configurable analogue outputs. Also LVDT amplifiers with configurable analogue outputs.



## ATEX - Approved Instrumentation

ATEX approved strain gauge or load cell amplifiers are designed for operation within hazardous zones 0, 1 and 2. Devices can be connected to ATEX approved equipment or to non-approved ATEX equipment outside the hazardous zone, when a barrier is used.



## Panel - Digital Panel Meters & Controllers

ADW15 weighing indicators, ADP15 universal input indicator and UAB universal digital signal conditioner controllers.



## Accessories - Junction Boxes & Displays

Accessories for Mantracourt's various product families.

# Industries

With over 40 years of design and manufacturing experience, Mantracourt are extremely well placed to provide product solutions across a wide range of applications. These are some of the many industry sectors that we operate in:

**Aerospace**



**Agriculture**



**Automotive**



**Alternative Energy**



**Civil Engineering**



**Construction**



**Food**



**Hazardous Areas**



**Industrial Processing**



**Lifting & Handling**



**Marine**



**Medical**



**Research**



**Silo & Weighing**



**Test & Measurement**



**Theatre & Events**



**Torque Measurement**



**Waste Management**





# MADE TO MEASURE



## 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.

### T24 PROVIDES

- Exceptional performance in the harshest of conditions
- High quality, low noise measurement
- 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.

### 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

### 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®.

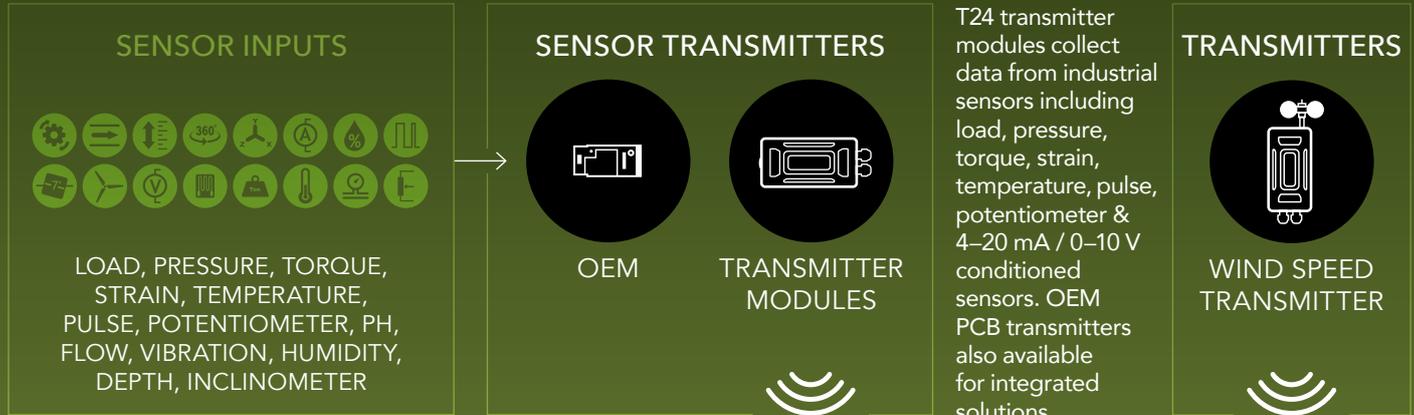
### FREE DATA LOGGING AND VISUALISATION SOFTWARE

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, 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.

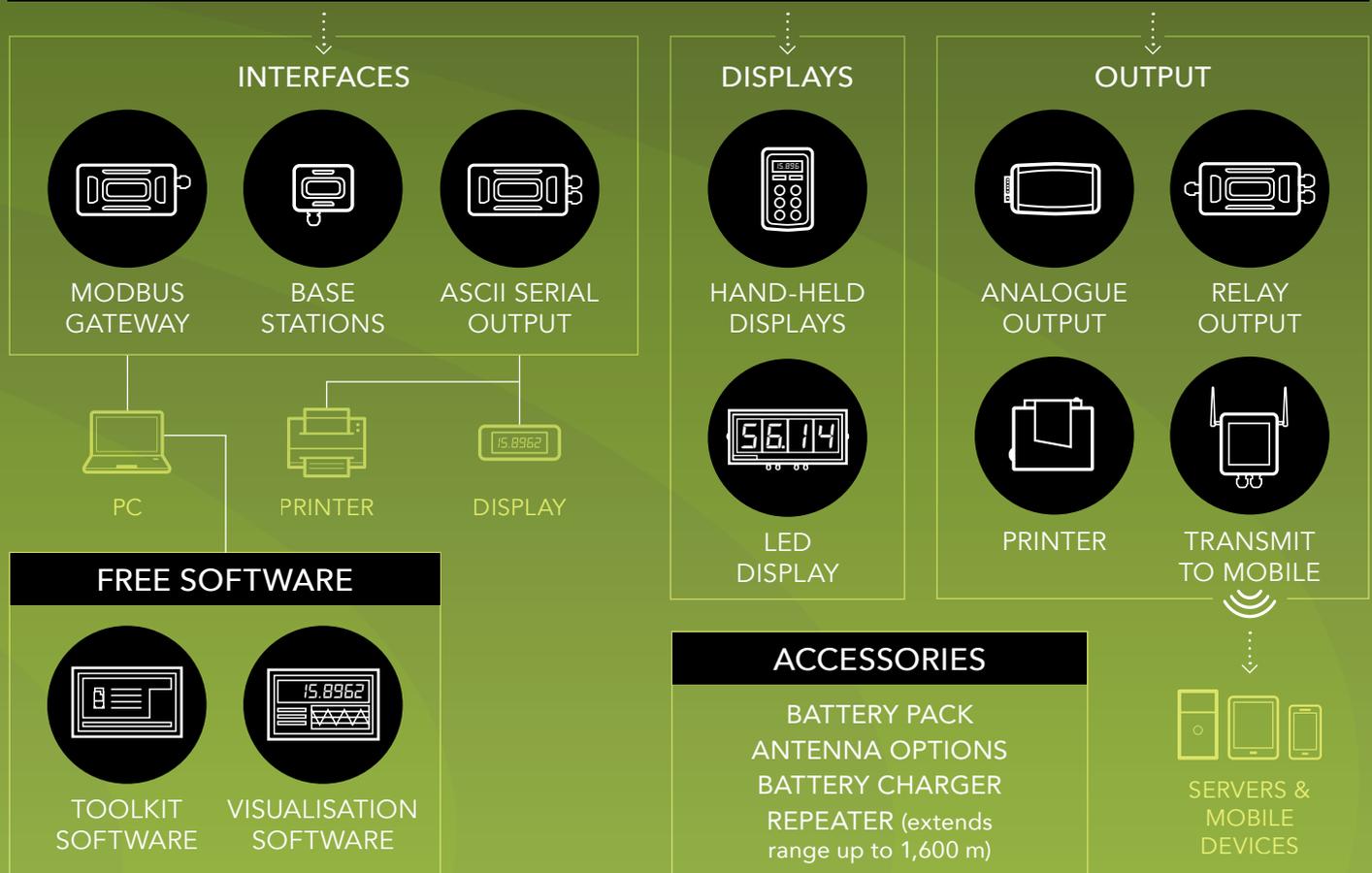


## A WIRELESS MODULAR SYSTEM

### TRANSMITTERS



### RECEIVERS



## WHY GO WIRELESS?

- Save time and cost compared to installing a similar wired system
- 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
- Ideal for temporary applications and reusable



## Application Areas

Our T24 wireless telemetry system is entirely flexible, enabling users to build wireless solutions which are unique to their application. Today, T24 is deployed in an array of different industries.

**"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

## Lifting & Handling

T24 wireless technology powers many market leading crane scale/under hook load cell solutions. The monitoring of cranes and lifting equipment to prevent overloading is vital for safety. Weighing of material by crane, forklift, conveyor or vehicle are all performed with our range of monitoring and control instrumentation.



## Construction & Civil Engineering

The design, build and maintenance of bridges, roads, railways and tunnels demands reliable measurement systems. Our technology is enabling surveyors, geo-technical specialists and structural engineers to record and log data from a large variety of sensors using innovative wireless techniques.

## Aerospace

Sensors have always played a part in the design and operations of the aerospace industry. Wireless sensors are used in aircraft weighing, monitoring and testing. T24 is being adopted across the whole industry including commercial aircraft, helicopter & space programmes.



## Industrial Manufacturing

In partnership with specialised sensors, T24 is being used within automotive and aerospace manufacturing to provide fast, accurate and reliable results to verify build quality on the production line. The flexible wireless system supports any number of sensors avoiding the expense of additional data hubs.



## Helpful Tip



Transmitter modules are available to fit inside three enclosure options: T24-ACM, T24-ACMm & T24-ACMi as pcb only / OEM versions.



### OEM Wireless Sensor Transmitter

- Wireless range up to 800 m (2,600 ft)
- Battery power 3 V DC
- Operating temperature -40 to +85°C
- 40 mm x 18 mm x 7 mm

#### Sensor Input Options (select one)



SA Strain   SAF Strain (2kHz)   IA Current   VA Voltage   TA Temperature   PA Pulse   RA Potentiometer

Order Codes based on selection above:

T24-SA, T24-SAF, T24-IA, T24-VA, T24-TA, T24-PA, T24-RA



T24-ACM

### Wireless Sensor Transmitter

- Wireless range up to 800 m (2,600 ft)
- Internal batteries (2 x D) or external power
- 164 mm x 84 mm x 57 mm
- Operating temperature -40 to +85°C
- Waterproof to IP67

#### Sensor Input Options (select one)



SA Strain   SAF Strain (2kHz)   IA Current   VA Voltage   TA Temperature   PA Pulse   RA Potentiometer

Order Codes based on selection above:

T24-ACM-SA, T24-ACM-SAF, T24-ACM-IA, T24-ACM-VA  
T24-ACM-TA, T24-ACM-PA, T24-ACM-RA



T24-ACMm

T24-BB1

### Wireless Sensor Transmitter

- Wireless range up to 500 m (1,600 ft)
- Battery power 3 V DC (2 x AAA)
- Operating temperature -40 to +85°C
- 76 mm x 24 mm x 20 mm
- IP50 rated

#### Sensor Input Options (select one)



SA Strain   SAF Strain (2kHz)   IA Current   VA Voltage   TA Temperature   PA Pulse   RA Potentiometer

Order Codes based on selection above:

T24-ACMm-SA, T24-ACMm-SAF, T24-ACMm-IA, T24-ACMm-VA  
T24-ACMm-TA, T24-ACMm-PA, T24-ACMm-RA



T24-ACMi

### Wireless Sensor Transmitter

- Wireless range up to 800 m (2,600 ft)
- Internal batteries (2 x AA)
- 80 mm x 63 mm x 34 mm
- Operating temperature -40 to +85°C
- Waterproof to IP67

#### Sensor Input Options (select one)



SA Strain   SAF Strain (2kHz)   IA Current   VA Voltage   TA Temperature   PA Pulse   RA Potentiometer

Order Codes based on selection above:

T24-ACMi-SA, T24-ACMi-SAF, T24-ACMi-IA, T24-ACMi-VA  
T24-ACMi-TA, T24-ACMi-PA, T24-ACMi-RA

# T24 Wireless Wind Speed Transmitter & Large Display



## Wireless Wind Speed Transmitter (Anemometer)

- $\pm 4\%$  from 10 to 125 mph
- Internal batteries (2 x D) or external power
- Output units - m/sec, kmph, mph, fps
- Wireless range up to 800 m (2,600 ft)
- Waterproof to IP67

Order Code: T24-WSS



## Wireless Large LED Display

- 100 mm (4") character format
- Wired logic inputs allow the user to remotely control tare and net/gross toggle functions
- Units conversion using output scaling e.g. kgs to lbs
- Wireless range up to 800 m (2,600 ft)
- Waterproof to IP67

Order Code: T24-LD1

# T24 Wireless Handheld Receivers



## Wireless Portable Display for Single Wireless Transmitter

- Two key operation offering tare functionality
- Auto 'power on' and 'power off' of remote transmitter module
- Data transmission to wireless printer capability
- Battery powered 40 hours use (2 x AA)
- Wireless range of up to 800 m (2,600 ft)
- Waterproof to IP67

Order Code: T24-HS



## Wireless Portable Display for Multiple Wireless Transmitters

- T24-HA receives up to 12 wireless transmitters
- Summed total of inputs feature. Auto 'power on' and 'power off' of remote transmitters
- Battery powered 40 hours use (2 x AA)
- T24-HR receives data from any number of wireless transmitters displaying 1 at a time
- Waterproof to IP67

Order Codes: T24-HA, T24-HR

# T24 Wireless Base Stations



## Wireless Base Station

- Collects data from and configures any T24 radio telemetry module using wireless
- Base station with USB, RS232 & RS485 outputs
- Wide range power supply (9-32 Volts)
- Wireless range of up to 800 m (2,600 ft)
- Integral antenna
- Waterproof to IP67

Order Code: T24-BSi



## Wireless Telemetry USB Base Stations

- Base station wirelessly configures any T24 telemetry module via USB. Provides wireless data acquisition from T24 wireless transmitters
- Use T24-BSu for wireless range of up to 500 m (1,600 ft) desktop or wall mount IP50 enclosure  
Order Code: T24-BSu
- Use T24-BSue for wireless range of up to 800 m (2,600 ft). Waterproof to IP67

Order Code: T24-BSue

# T24 Wireless Repeater & Gateway



## Wireless Range Extender

- Extends range up to 1600 m (5,200 ft)
- Also used to pass the wireless signal around an obstruction such as buildings
- Internal battery (2 x D) or external power supply
- Waterproof to IP67

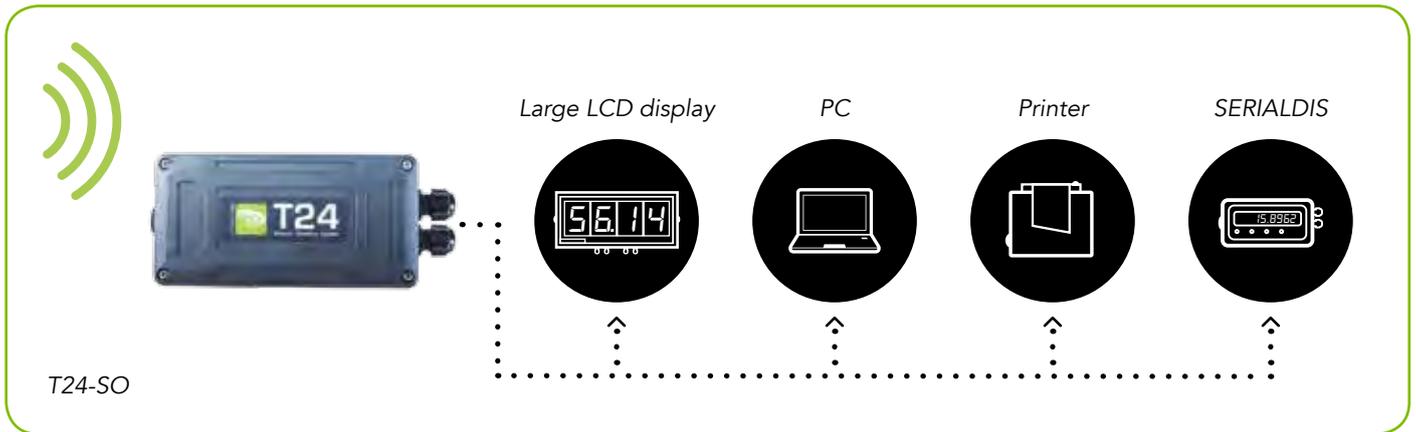
Order Code: T24-AR



## Wireless Modbus Gateway

- Gathers data from up to 100 wireless transmitters
- Modbus gateway Modbus RTU or ASCII interface (RS232/RS485)
- Stores data which can be requested by a Modbus system
- Wireless range of up to 800 m (2,600 ft)
- External power supply (9-32 Volts)
- Waterproof to IP67

Order Code: T24-GW1 13



## Wireless Receiver with Data Port for Display or Printer

- Radio telemetry serial ASCII output gateway
- This module generates a serial output ASCII string which can include data from up to 8 x wireless transmitters as well as optionally sum them. The output is suitable for displays, printers, loggers, PLCs and computers
- Wide operating supply range (9-32 Volts)
- Simple configuration and calibration
- Wireless range of up to 800 m (2,600 ft)
- Waterproof to IP67

Order Code: T24-SO



## Wireless Receiver with Relay Output

- Accepts up to 16 inputs from T24 wireless transmitters and triggers a range of selectable output actions
- 2 x 240 V AC 5 A relay modules for control & alarms
- Waterproof to IP67

Order Code: T24-RM1



## Wireless Receiver with Analogue Output

- Provides an analogue output from a single T24 wireless transmitter
- Wireless range of up to 800 m (2,600 ft) for T24-AO1i (IP67) up to 100 m (330 ft) for the desktop version
- Configurable analogue outputs of 0-10 V, 0-5 V, 4-20 mA, 0-20 mA,  $\pm 10$  V,  $\pm 5$  V. Update rate of up to 2,000 per second

Order Codes: T24-AO1, T24-AO1i



## Wireless Printer

- Prints data from up to 8 wireless transmitters or a handheld module. User definable printed report page & surface mounting enclosure.
- Simple wireless configuration
- Wireless range of up to 800 m (2,600 ft)
- 57 mm (2.244") paper width

Order Code: T24-PR1

## Local Wireless Receiver Transmitting to Mobile Networks

- Uses mobile network (GPRS) to transmit text message, email, FTP and web
- Receives data from up to 200 wireless transmitters
- User configurable alerts on event
- Wireless sensor range of up to 800 m (2,600 ft)

Order Code: T24-RDC



## Toolkit for Configuration & Calibration

- Free wireless telemetry software toolkit
- Enables users to select a required device
- Configures & calibrates sensors via wireless
- Logs data to a CSV file (requires a base station to operate)
- Radio link quality indication
- Assign transmitters with security keys
- View and alter device parameters

Order Code: T24-TK

## Logging & Mapping Software

- Displays and logs data from up to 100 wireless sensor transmitters
- Build a visual picture of your system and assign live readings
- Customised branding for company logo and colour scheme
- Web server offers remote viewing on iPads, tablets & smart phones (requires a base station to operate)

Order Code: T24LOG100 15



## Strain Gauge Amplifier, Converts Load Cell to 4-20 mA & 0-10 V

- Can fit inside sensors, 19.5 mm diameter
- Bandwidth 1 kHz
- Outputs of 4-20 mA, 0-10 V, 0-5 V,  $\pm 10$  V
- Non interaction between the trimmers makes calibration fast and easy

Order Codes: ICA1, ICA2, ICA3, ICA4 & ICA6H, & ICA5S

## In-Line Housing for Load Cell ICA & DCell Converters

- The ILE and ICA converts a load cell to a conditioned load cell
- The ILE and DCell converts load cell to a digital load cell
- Small size – 56 x 28 mm excluding glands
- Machined from solid stainless steel
- Waterproof to IP67 NEMA 6

Order Code: ILE

# PSD Handheld Strain Gauge Displays



## Load Cell or Strain Gauge Display

- Handheld 7 digit LCD display with peak, trough, net, overload and shunt cal indication
- Battery life of 450 hours in power save mode
- Keys for on/off, range select, peak/valley hold, and gross/net
- Single pass calibration (direct mV/V) with dual range for values such as kg and lb
- Waterproof to IP65 NEMA 4

Order Code: PSD

## Load Cell or Strain Gauge Display with RS232 Data Port

- PSD with RS232 interface which allows connection to many interfaces including PC and data loggers, etc.
- Waterproof to IP65 NEMA 4

Order Code: PSD232



DSCUSB



DSCUSB-TK

DSCUSBOEM



DSCUSBOEM1

**NEW Potentiometer Version Available**

## Strain Gauge to USB Converter

- Very high stability, providing superior performance
- USB strain gauge interface – device appears as a virtual com port. Simple & easy to connect to your strain gauge sensor to PC
- Multiple devices can be used with one PC
- Also available as an OEM board
- IP50 rated

Order Codes: DSCUSB, DSCUSBOEM

## Software Toolkit for DSCUSB

- Free software for configuration, calibration, logging & parameter management of the DSCUSB
- Viewing of input with annunciators for integrity & range errors
- 2 point calibration by application of known weight or by load cell data

Order Code: DSCUSB-TK



**EVAL  
KITS  
AVAILABLE**



DSC



DCell

DTEMP



DSJ4

DSJ1

DS485DIS

## Digital Load Cell Converters

- DCell - Strain gauge to RS485 or CAN digital load cell converter with low profile, small 19 mm for mounting inside sensor
- DSC - Strain gauge to RS232, RS485 or CAN digital load cell conditioning card with option of a junction box for up to 4 x DSC
- DCell & DSC - Auto calibration or direct entry of mV/V with linearisation, high performance, resolution 1 part in 200,000

Order Codes DCell: DLC, DSC

## Display & Mounting Options

- DS485DIS - Display for up to 8 DSC or DCell modules
- DSJ4 - Mount board for up to 4 DSCs
- DSJ1 - Mount board for 1 x DSC or 1 x DCell
- Waterproof to IP65 NEMA 4
- Cases available separately – JAB (for DSJ1), LAB (for DSJ4), LTL (clear lid)
- DTEMP - Sensor for load cell temperature compensation

Order Codes: DS485DIS, DSJ1, DSJ4, DTEMP 17



LCA20

LCB20



LCD20

LC Toolkit

## Load Cell Amplifier with Display

- Full digital set-up using PC or keypad
- 3 x configurable digital inputs
- 6 wire connection / 10 pt linearization
- 0-10 V and 4-20 mA analogue outputs
- RS485 and RS232 data output option
- 2 relay outputs for alarms or control option
- 5V excitation drives up to 10 x load cells (350 R)

Order Code: LCA20, LCB20 (pcb only)

## Load Cell DIN Rail Signal Amplifier

- Compact, stackable microprocessor
- 2 single pole relays and digital inputs
- Full digital setup & easy programming via handheld unit or USB connection to a PC using free toolkit software
- Standard analogue output 4-20mA and 0-10V
- 6 wire connection
- 10 pt linearization

Order Code: LCD20



SMW



LCI

## Display for Weighing, Temperature, 0-10 V, 4-20 mA, Speed, Potentiometer & Strain Gauges

- Large 6 digit LCD display and keypad
- Analogue output of 0 -10 V & 4 - 20 mA
- 2 x relay outputs
- 1 x RS232 & RS485 data ports
- Use SMP option for universal inputs

Order Codes: SMW, SMW-HR, SMP

## Load Cell Fault Monitor Alarm Output

- 4 channel junction box for load cell summing applications with mV/V display. Detects open or short circuit load cell connections and whether any load cell falls outside of pre-set balance or operating range
- Bulkhead or DIN rail mount
- Waterproof to IP65 NEMA 4

Order Code: LCI



## Load Cell & Strain Gauge Amplifier

- Bridge excitation of 10 V DC with drive for four 350 Ohm load cells
- Conditioned output signal can be selected from 0-20 mA, 4-20 mA, 0-10 V, 0-5 V,  $\pm 5$  V or  $\pm 10$  V
- 1 - 5 kHz adjusted filter
- AC and DC powered options
- Bridge completion module available (SGABCM)

Order Codes: SGA/A, SGA/D & SGABCM

## LVDT Signal Conditioner and Amplifier

- LVDT sensor excitation 4.5 V RMS AC frequency 1 to 5 kHz
- Selectable sensitivity from 20 mV to 10 V and fine trim with potentiometer
- Analogue outputs of 4-20 mA & 0-10 V
- Wide bandwidth (200 Hz) for test and measurement applications

Order Codes: LVDT/A & LVDT/D

## ATEX Approved Instrumentation



### ATEX Certified 4-20 mA Load Cell Amplifier

- Certified amplifier for hazardous zones 0, 1 & 2
- Designed for fitting in-line to strain gauge sensors such as load cells
- Intrinsically safe to EN60079-11
- Provides 2 wire, 4 - 20 mA current loop output
- Waterproof to IP67 NEMA 4

Order Code: ALA5

### ATEX Certified Miniature Load Cell Amplifier

- For hazardous zones 0, 1 & 2
- Miniature PCB format for fitting inside sensors, 19 mm diameter, 7.6 mm height
- 2 wire current loop 4-20 mA output
- Low interaction between the trimmers makes calibration fast and easy

Order Code: ICA5ATEX 19



ADW15



ADW-LW

## Weighing Indicator with Analogue Data & Relay Outputs

- Direct strain gauge input 4.5 digit display
- 4-20 mA & 0 -10 V analogue output
- 2 relay outputs for control and alarm
- Data port RS232 / RS485
- Waterproof to IP65 NEMA 4

Order Codes: ADW15

## Weighing Controllers

- ADW-LW for hopper discharge loss-in-weight filling
- ADW-BW for batch control
- ADW-FFW optimised for fast fill control
- ADW-SP16 with 16 relays

Order Codes: ADW-LW, ADW-BW, ADW-FFW, ADW-SP16



ADP15



ADP-SP16

## Digital Panel Meter for Process Inputs

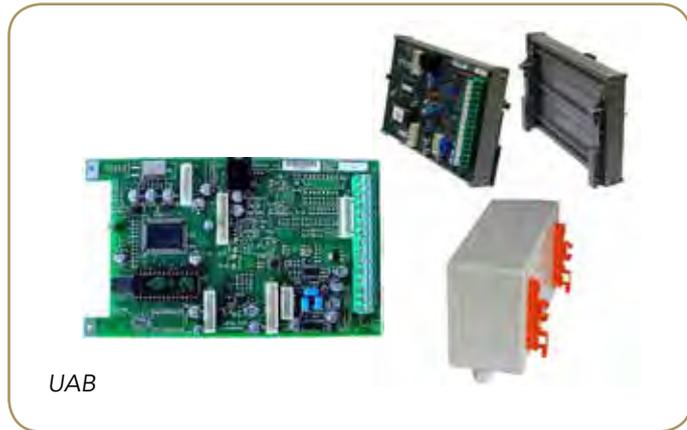
- Full range of industry inputs
- 4 - 20 mA & 0 -10 V analogue outputs
- 2 relay outputs for control and alarm
- Data port RS232 / RS485
- Waterproof to IP65 NEMA 4

Order Code: ADP15

## Versatile Indicator & Controller with up to 16 Set Points

- Full range of industry inputs
- 4 - 20 mA & 0 -10 V analogue output
- 16 relays outputs for controller alarm
- Data port RS232 / RS485

Order Code: ADP-SP16



UAB

## Universal Input Digital Signal Conditioner and Controller

- Digital set-up and calibration using handheld plug-in display / keypad or comms
- Optional local or remote LCD display and keypad
- Fully isolated 4-20 mA and 0-10 V analogue outputs
- Set-points with 2 x SPCO relays
- RS232 or RS485 communications for setup, data transfer or label/ticket printing *Order Code: UAB*

## Support & Resource

**Knowledge Centre**  
[mantracourt.com/faqs](http://mantracourt.com/faqs)

**Manuals, Software & Presentations**  
[mantracourt.com/software](http://mantracourt.com/software)  
[mantracourt.com/documents](http://mantracourt.com/documents)

## For More Information

**Web:** [mantracourt.com](http://mantracourt.com)  
**Tel:** +44 (0)1395 232020  
**Email:** [sales@mantracourt.com](mailto:sales@mantracourt.com)

# Accessories Junction Boxes & Display



JBA

## Active & Passive Summing Load Cell Junction Boxes

- Active summing load cell junction box sums the outputs from up to 4 x 350 - 1,000 Ohm strain gauge load cells. Individual gain adjustment provided for each channel
- Passive load cell junction box for 4 x load cells connected in parallel
- Waterproof to IP65 NEMA 4

*Order Codes: JBA (Active), JPP (Passive)*



SERIALDIS

## Remote Digital Display Module

- This display module accepts serial ASCII data and converts it to an LED display
- 6 digit, 7 segment LED 20 mm display
- RS232 or RS485 serial ASCII input
- Waterproofed to IP65 NEMA 4

*Order Code: SERIALDIS*

# How to Buy

## International Distribution Network

Mantracourt's specialist measurement products can be purchased throughout the world via our global network of distributors who are able to assist with product selection through to product support. Each offer value added services and expertise in their own field.

Visit our website to browse distributors in your region: [mantracourt.com/partner-finder](http://mantracourt.com/partner-finder)

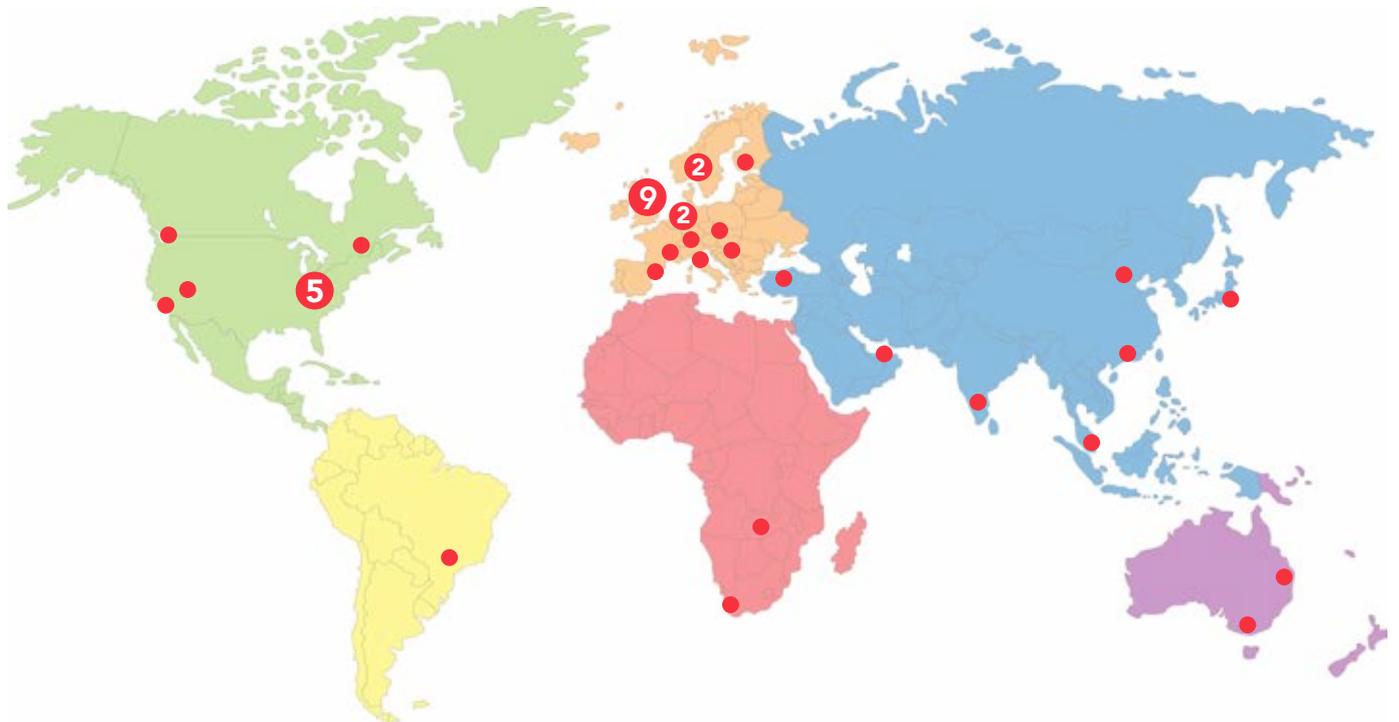
For countries not shown, please contact Mantracourt sales directly: [sales@mantracourt.com](mailto:sales@mantracourt.com)

### Distributor Locations

North America

UK & Europe

Russia, ME & Asia



South America

South Africa

Australia & NZ

#### Sales Enquiries

Call our friendly sales team for quotes, leadtimes and shipping:

+44 (0) 1395 232020  
[sales@mantracourt.com](mailto:sales@mantracourt.com)

#### Technical Enquiries

Contact our technical sales engineers for technical enquiries and further product information:

+44 (0) 1395 232020  
[technical@mantracourt.com](mailto:technical@mantracourt.com)



# Connect with Us Online



Stay in touch and hear about our latest products and news. Scan these QR codes with your smart phone:

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## Customer Profile

### Our Customers

Mantracourt devices are used in many different industries and applications and we are proud to be associated with the organisations which use our products.



In the interests of continued product development, Mantracourt Electronics Limited reserves the right to alter product or design specifications without prior notice. All products designed & manufactured in the UK, with a minimum one year warranty. E&OE

# Designed & Manufactured in the UK



[mantracourt.com](http://mantracourt.com)

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**ME**mantracourt  
Advanced Intelligent Instrumentation

## FIND OUT HOW TO MEASURE A T-REX...

Using the T24 Wireless Telemetry Sensor System  
and bring measurement back to life at:

[wirelessensorsystem.com](http://wirelessensorsystem.com)

