

## New Generation Telemetry Base Station

### Features



- USB Interface
- DLL (Dynamic Link Library) files for software developers
- RS232 and RS485 Interfaces (T24-BSi Only)
- Variable Baud Rates (T24-BSi Only)
- Cased or Din Rail mounting options (T24-BSi Only)
- 1 year manufacturer's warranty



### Introduction

The T24 radio telemetry range is currently supported by two base stations; the T24-BSu and the T24-BSi, which in conjunction with the T24-tool kit can be used to configure all the devices within the range. Devices can listen for and transmit data packages to any device therefore making control and group measurement very simple.

#### T24-BSi

The T24-BSi is the industrial base station, housed in an IP65 standard enclosure. This device offers far more interface options for a user. The T24-BSi can be powered and controlled using a single USB interface; however the T24-BSi also has serial RS232 and RS485 interfaces at baud rates of 9600-460800. When using either of the serial interfaces the device must be powered externally. The serial interface .dll (Dynamic Link Library) provides the ability for customised user software to be created with the use of VB (Visual Basic) over any interface the user wishes to select.

#### T24-BSu

The T24-BSu is a simple USB device. It draws power from the USB bus and therefore no further components are required to configure and control remote devices from a PC. The T24-BSu is supported by not only the T24-toolkit but also with a .dll (Dynamic Link Library) allowing customers using VB (Visual Basic) to develop their own custom software for their applications.

### Specifications - T24-BSi

Parameter	Min	Typ	Max	Units	Notes
External Supply voltage Range	4.5	12	32	Volts	
USB Supply Range	4.875	5	5.125	Volts	As defined by USB 2.0 Specification
Average Operational Current	-	TBD	500	mA	
USB Bus Powered Operational Current	100		200		
Operating Temperature Range	-40	-	65	Deg C	
Storage Temperature Range	-40	-	65	Deg C	
Reverse polarity Protection		-	-32	Volts	Maximum Supply level

### Specifications - T24-BSu

Parameter	Min	Typ	Max	Units	Notes
USB Supply Range	4.875	5	5.125	Volts	As defined by USB 2.0 Specification
USB Bus Powered Operational Current	100		200		
Operating Temperature Range	-40	-	65	Deg C	
Storage Temperature Range	-40	-	65	Deg C	

Environmental	Min	Typical	Max	Units
IP rating (T24-BSi serial only)		IP65		
Operating temperature range	-10		+50	C
Storage temperature	-40		+85	C
Humidity	0		95	%RH

### Product Order Codes

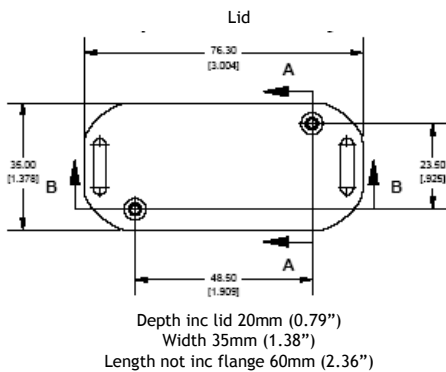
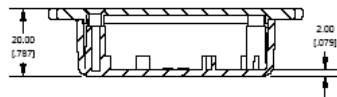
T24-SAi	Strain Gauge Acquisition Module internal antenna	T24-HS	Handheld Reader Simple
T24-SAe	Strain Gauge Acquisition Module with socket for external antenna	T24-HA	Handheld Reader Advanced
T24-VAi	Voltage Acquisition Module internal antenna	T24-BSu	Base Station USB
T24-VAe	Voltage Acquisition Module with socket for external antenna	T24-BSi	Base Station Industrial
T24-IAi	Current Acquisition Module internal antenna	T24-SO	Serial Output
T24-IAe	Current Acquisition Module with socket for external antenna	T24-BC1	Battery Charger
T24-SAfi	'Fast' Strain Gauge Acquisition Module internal antenna	T24-ACM	Single Channel Acquisition Connectivity Module
T24-SAfe	'Fast' Strain Gauge Acquisition Module with socket for external antenna	T24-PR1	Thermal Printer

### Mechanical Dimensions

#### T24-BSu USB Base Station

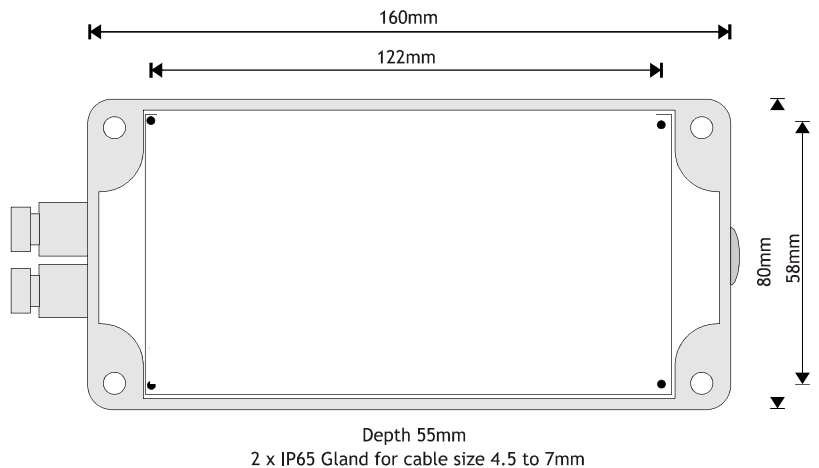
Case dimensions	20 x 35 x 60mm
Case materials	Black ABS IP54. Flanged lid for wall or shelf mounting or suspending with a tie wrap

Side view



#### T24-BSi Industrial Base Station

Case dimensions	160 x 80 x 55mm
Case materials	Light grey ABS with IP65 cable glands
Terminals	2.5mm, rising clamp field terminals
Accessibility	All electronics accessible by removing lid
Power Supply	From 'on-board' batteries (2 x D size cells Alkaline) please note these batteries are not included



### Approvals

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



Industry Industrie  
Canada Canada

In the interests of continued product development, Mantracourt Electronics Limited reserves the right to alter product specifications without prior notice.

