



14" aluminium marine block with TX2 counter electronics, illustration only

# Tcount the wireless marine cable counter system

**Tcount** is a reliable and accurate system for measuring the length of cable passing over a snatch-block. Designed to overcome the unreliability of systems using a deck lead, a radio link is used to display the count on an IBM™

compatible PC, or the optional hand-held receiver. This innovative approach allows the operator more confidence when access in bad weather conditions prevents maintenance or repair at sea.

## APPLICATIONS

**Tcount** has been developed to meet the needs of Oceanographers, Hydrographers & Surveyors who require an accurate measurement of deployed cable in conjunction with, for example, the following under-water equipment:

**SIDE SCAN TOW-FISH  
R O V  
C T D SYSTEMS  
SUB-BOTTOM PROFILERS ETC.  
UNDULATING TOWED VEHICLES**

## THE SHEAVE BLOCK

The 20" block, (shown right), is purpose designed for **Tcount** and incorporates the sensor electronics within the aluminium casting.

The blocks are made from lightweight aluminium alloy casting providing optimum strength to weight characteristics.

Long-life bearings are fitted for trouble free operation under adverse operating conditions whilst the sheave is heat treated to increase wear resistance.

The standard sheave is machined for a maximum cable diameter of 18mm, other sizes can be machined to order, please check with your cable manufacture for recommended minimum sheave diameter.

## THE RADIO RECEIVER & PC INTERFACE

The low power 418mHZ MPT1340 license exempt radio transmission from the integral snatch block sensor is detected by a small radio receiver (active antenna), which connects to the PC's serial interface using twin core cable to pass data and power.

## THE SOFTWARE

The software converts the serial format to show distance and speed on the PC's display and is provided on an installation disk which guides the user through the simple set-up procedure. Set-up parameters, including circumference, can be entered at any time from within the programme. Each counter is allocated a unique "address" thus allowing up to 4 counters to be received and displayed simultaneously.

## OPTIONS

**Installation kit** for retrofitting existing snatch blocks.

**Ruggedised hand-held display** incorporating its own receiver for use on ships deck.

**Desk top display** can be used instead of the PC interface to display one of four counters on a large 1" LCD display

**Repeater** the Desk top display can be used in addition to the PC interface to display one of four counters at various locations throughout the ship.

## FEATURES include:

- ☞ **No cables to get damaged around the snatch-block** - therefore less downtime
- ☞ **Count value held in sensors memory** (despite interference) Remote reset
- ☞ **Easy "fit and forget" installation**
- ☞ **Any number of users can receive counter "broadcast"**
- ☞ **Up to 4 counters can be addressed and stored** using the Windows™ software supplied or by users software, e.g. Procomm™, via the serial port
- ☞ **Easily interfaced to sonar processing software**
- ☞ **Radio licence exempt in UK,** (enquire for other options)

## TECHNICAL SPECIFICATIONS

### PC INTERFACE

**DIMENSIONS:**  
65mm X 55mm  
**SERIAL OUTPUT:**  
9600/E/8/1 STOP BIT  
**SERIAL FORMAT:**  
A:DDDD[CR] [LF]  
(A=address), D=0-9999  
**SERIAL DATA:**  
RS232 HOST COMPATIBLE  
**POWER SUPPLY:**  
12VDC 100mA (SUPPLIED)  
**CONNECTOR:**  
25 WAY FEMALE "D" TYPE

### DESKTOP DISPLAY

**SERIAL FORMAT:**  
A:+/DDDD[CR] [LF]  
9600/N/8/1 STOP BIT

### RADIO RECEIVER

**DIMENSIONS:**  
100mm X 38mm DIA  
**WHIP LENGTH** 165mm  
**FREQUENCY:**  
418MHZ (MPT1340 WT)  
**POWER:**  
SUPPLIED FROM PC I/F  
**DATA:**  
CURRENT LOOP  
**CONNECTOR:**  
2 PIN MALE "BUCCANEER"

### SNATCH BLOCK SENSOR

The sensor is fitted by mounting in a 38mm clearance hole using the locknuts supplied. The stainless steel locknuts are used to adjust the clearance between sensor and magnet.

**RANGE:**  
Up to 200 metres dependent on the operating environment

**FREQUENCY:**  
418MHZ (MPT1340 MT)

**POWER SUPPLY:**  
LITHIUM BATTERY

**TRANSMIT POWER**  
0.25mW E.R.P

**LIFE, (STANDBY):**  
10 YEARS\*

**LIFE, (OPERATIONAL):**  
6 YEARS\*\*

**MAXIMUM COUNT:**  
8192 REVOLUTIONS

**MATERIAL:**  
STAINLESS STEEL 316

\* Assumes the snatch block wheel to be stationary

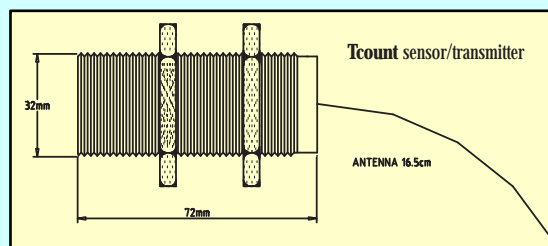
\*\* Assumes a count of 6000 revolutions every day!



DTD254 Desktop display can be used as main display or as a repeater



20" sheave block complete with Tcount retrofit



## Tcount Electronic Counter System

For further details contact:

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Technical specifications may be subject to change