



## TYPE: T24-AO1i



# T24-AO1i Telemetry Analogue Output Module

## Description

T24-AO1i provides a configurable analog output for the range of T24 acquisition modules. The output can be selected from the pre-calibrated voltage and current ranges, 0-10Volts,  $\pm 10$ Volts, 0-5Volts,  $\pm 5$ Volts, 0-20mA, 4-20mA, which can be used in either 'sink' or source mode.

LED's in the T24-AO1i provide indication of the state of the radio link, remote battery life and remote status. The T24-AO1i uses open collector outputs to relay this information. A digital Input allows for zeroing of the incoming data value. The T24-AO1i modules are easily configured using the T24 Toolkit software and a base station, and are housed in an IP67 NEMA4 sealed housing for industrial installation.

LCM Systems can supply the T-24 products integrated into various sensors, to form a wireless sensor system. There are several standard products which utilise the T24 range, including the TELSACK, TLL and RILL ranges.

Please contact LCM's sales department to discuss your wireless load cell requirements.

## Specification

Data rate	Up to 2000 updates per second
Radio frequency	2.4GHz
Power	10mW
Range	Up to 800m (2,600ft)
Channels (DSSS)	16
Electrical supply voltage	9 to 32Vdc
Operational current	100mA (typical)
Operating temperature range	-20 to +55 °C
Storage temperature range	-40 to +85 °C
Maximum humidity	95% non condensing
Cable size	Ø4 to 8mm
Environmental sealing	IP67/Nema4

## Current Output

Current ranges	4-20mA, 0-20mA sink & source
Resolution/bits	65,000/16 bits
Output gain stability (max)	$\pm 0.03\%$ FS/°C
Output zero stability (max)	$\pm 0.02\%$ FS/°C
Maximum load impedance	500 ohms
Linearity (max)	$\pm 0.02\%$ FS

## Voltage Output

Voltage ranges	0-5V, 0-10V, $\pm 5$ V, $\pm 10$ V
Resolution/bits	65,000/16 bits
Output gain stability (max)	$\pm 0.015\%$ FS/°C
Output zero stability (max)	$\pm 0.015\%$ FS/°C
Maximum load impedance	5000 ohms
Linearity	$\pm 0.01\%$ FS

## Features

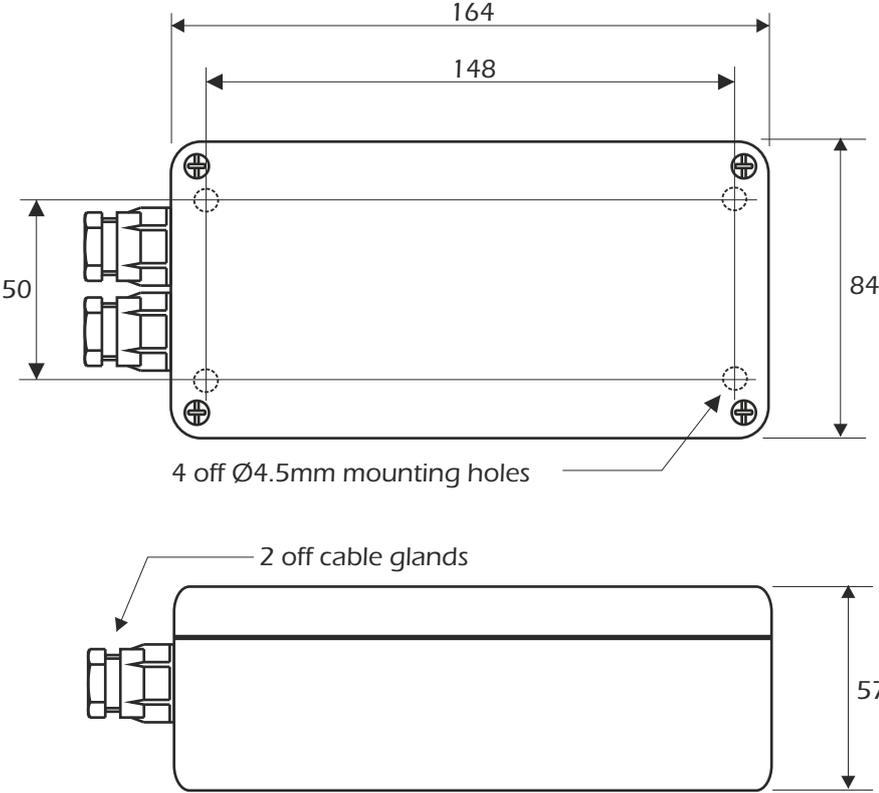
- 2 way radio system for data integrity
- 0-10V, 4-20mA, 0-20mA,  $\pm 10$ V and  $\pm 5$ V analogue outputs available
- Wireless range of up to 800m (2,600ft)
- Integrated internal antenna
- Update rate of up to 2000 per second (depending on acquisition module)
- Simple configuration of acquisition module via PC using a base station and telemetry toolkit software
- IP67 sealed enclosure

## Typical Applications

- Wireless load shackles/load links
- Platform weighing
- Vehicle weighing
- Rotating machine force measurement
- Balancing systems
- Simple centre of gravity

# T24-AO1i Telemetry Analogue Output Module

## Dimensions



www.lcmsystems.com

**LCM Systems Ltd**

Unit 15, Newport Business Park, Barry Way  
 Newport, Isle of Wight PO30 5GY UK  
 Tel: +44 (0)1983 249264  
 sales@lcmsystems.com  
 www.lcmsystems.com

Due to continual product development, LCM Systems Ltd reserves the right to alter product specifications without prior notice.

CE Complies with EMC directive. 2004/108/EC

FC The Radio Equipment and Telecommunications Terminal Equipment (R&TTE) Directive, 1999/5/EC. Family: RAD24

Industry Canada Industrie Canada IC:7224A-RAD24

**Issue No. 1**

Issue date: 28/02/2019

APPROVED

(unapproved if printed)