

T24-HR Wireless Telemetry Roaming Handheld Display

TYPE: T24-HR

Features

- Battery Powered and compact
- Wakes and reads unlimited numbers of acquisition modules
- Worldwide licence exempt 2.4 GHz radio
- 120 metre (400 feet) range maximum
- Simple configuration via PC using base station with Telemetry Toolkit software
- Environmentally sealed to IP65
- Remote battery check
- Can power off a remote acquisition unit, to preserve system battery life.

Description

The T24-HR is a portable battery-powered roaming handheld which allows the viewing of an unlimited number of acquisition modules.

By simply 'roaming' past the acquisitions modules, the handheld will wake each device and display the data tag of the remote acquisition module on the LCD display. With user-friendly T24 toolkit software, the data tags can be set to allow identification of each acquisition device allowing the viewing experience to be tailored to each particular application.

The T24-HR is a display that is very simple to operate, with just two buttons; one to power the product on/off, the second to allow viewing of any detected devices that have been detected.

The licence-free 2.4GHz radio signal provides a line-of-sight communication range of 120 metres (400 feet), extendable by the use of a repeater (T24-AR). The use of the latest DSSS radio technology minimises local radio interference and ensures data integrity and security.

The wide operating temperature range and the robust technology ensures that the T24-HR it is not susceptible to harsh physical or electrical environments.

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 TELSHACK range and RILL ranges.

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



Typical Applications

- Wireless shackle load cells
- Wireless link load cells
- Hoist load monitoring
- Cable tension measurement
- Mast stay load monitoring

Specification

General Radio

Parameter	Min	Typical	Max	Units
Licence		Licence Exempt		
Modulation method		MS (QPSK)		
Radio type		Transceiver (2 way)		
Data rate		250		K bits/sec)
Radio Frequency	2.4000		2.4835	GHz
Power		1		mw
Range RAD24i (Integrated antenna)			120 (400)	Metres (feet) *
Range RAD24e (External antenna)			200 (650)	Metres (feet) *
Channels (DSSS)		16		

* Maximum range achieved in open field site with T24-SA at a height of 3 metres above ground and T24-HR held at chest height pointing towards the T24-SA.

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Electrical	Min	Typical	Max	Units
Power Supply voltage	2.4	3.0	3.6	V dc

Power Supply Current	Min	Typical	Max	Units
Active		35	40	mA
Low power mode		120	160	uA

Estimated Battery life (using 2Ahr batteries):	Min	Typical	Max	Units
Standby mode (Powered off)		1.5		Years
Continuous operation		40		Hours

Use a pair of alkaline AA batteries. Due to the higher voltage requirements of this device NiMH and NiCad batteries are not recommended.

Environmental	Min	Typical	Max	Units
IP rating		IP65		
Operating temperature range	-10		+50	°C
Storage temperature	-40		+85	°C
Humidity	0		95	%RH

Module Transmits & Receives using:

1. Full error detection and correction
2. Remote and Local battery check

Approvals

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

FC
Family: RAD24

 Industry Canada Industrie Canada IC:7224A-RAD24

Mechanical Dimensions

All dimensions in millimeters



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

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