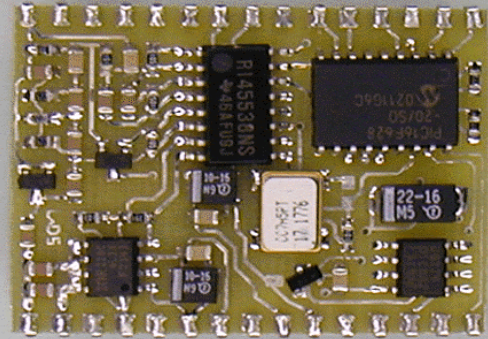




Latest Advanced Digital Solutions, Inc.

**RADIO
FREQUENCY
IDENTIFICATION
DEVICES**



LADS MR-01 Micro Reader

Data Sheet

Description

The Series MR-01 Micro Reader is an intelligent module which provides all the RF and control functions to communicate with 134.2 kHz HDX/FSK transponders. It comes as a 30-pin Dual-in-line printed circuit board, is equipped with a serial communication interface and works together with a 47 uH low-Q antenna thereby eliminating the need to tune the system to resonance. This reader comes with *LADS, Inc.* simple protocol allowing the quickest integration path for application developers.

Specifications:

	<i>LADS MR-01</i>
Operating Temperature	-20 to +50 ⁰ C
Storage Temperature	-40 to +85 ⁰ C
Relative Humidity	<97% non-condensing, IEC 68-2-30 Test Db, 21 cycles
RF Transmit Frequency	134.2 kHz
Power Supply	5 Vdc, regulated +/- 10% <i>LADS</i> designed Hybrid power regulator used to eliminate interference
Typical Current Consumption (Antenna Q = 12)	Active mode: 100 mA Idle mode: 5 mA
Communications Interface	Serial Communications Interface (SCI), TTL and <i>RS232 driver for direct connect</i>
System Architecture	Point-to-point
Communications Parameters	9600 baud, 8 data bits, no parity, 1 start bit, 1 stop bit
Communications Protocol	Serial Communications Protocol with Simple Protocol
RFM-007/008 Driver	Pins available on MR-02 to drive Power RFM 007B or RFM 008B
Antenna	47 uH low Q (10-20)
Read Cycle Time	68 msec
Transponder Types	134.2 kHz HDXIFSK
Package	30-pin Dual-in-line, plug/solder in
Dimensions	(38.3mm x 29.3 mm x 13.5 mm) ± 0.5mm
Weight	5g
Available I/O pins	Valid ID indicator
	TTL signal to indicate valid transponder feedback (software control or MR control)
	RS232C TX, RX, Sig Gnd 2 additional TTL signals for customer applications
Firmware features	Challenge for DST generation
	In-circuit programming of micro-processor.

For more information, contact the sales office at (512) 415-8624. This contact information and product information can be found on our web site at: <http://www.ladsinc.com>

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02/14/05