

Product Bulletin

# Texas Instruments LF Reader Family

**Description**

The Texas Instruments LF reader family provides all the functionality required to communicate with 134.2 kHz low-frequency (LF) transponders that are available in a variety of form factors. The whole performance scale is very well served by a complete portfolio of devices ranging from single chip low power transceiver ICs to high power industrial readers and modules.

Different reader types are well suited for usage in a broad range of applications including, but not limited to, access control, vehicle identification, container tracking, asset management and waste management applications.

**Key Benefits**

- Best in class performance through patented HDX technology
- Automatic antenna tuning
- Complete portfolio
- Best value
- Easy to use and install

**LF Transponder Family Specifications**

Supported Standards	ISO/IEC 11784/11785
Recommended Operating frequency	134.2 kHz
Communication interface	RS485/RS232/Digital I/O
Read rate	70 ms (64 bit UID)



The LF reader product family (starting clockwise from the top left) includes the RI-RFM-003B, RI-RFM-007B, RI-RFM-008B, RI-ACC-008B, RI-STU-251B, RI-CTL-MB2A/RI-CTL-MB6A, RI-RFM-006A, TMS3705A1DRG4 and RI-STU-MRD1.

**LF Transponder Family**

Part Number	RI-TMS3705ADR	RI-RFM-006A	RI-RFM-003B	RI-STU-MRD1
Type	IC	IC	Power Module	Reader Module
Typical Read range*	up to 20 cm	up to 20 cm	up to 60 cm	up to 30 cm
Interface	I/O	I/O	I/O**	SCI (RS232, TTL level)
Part Number	RI-CTL-MB2A	RI-CTL-MB6A	RI-RFM-007B	RI-RFM-008B
Type	Digital Contr. Module	Digital Contr. Module	Power Module	Power Module
Typical Read range*			up to 200 cm	up to 200 cm
Interface	RS232**	RS422/485**	I/O**	I/O
Part Number	RI-ACC-008B	RI-STU-251B		
Type	Power Module	Reader/Writer		
Typical Read range*	up to 200 cm	up to 200 cm		
Interface	I/O**	RS232/422/485		

\*\* Dependent on the configuration used, the RF regulation in country of use and the environmental condition.  
 \*\* Modules RI-CTL-MB2A/RI-CTL-MB6A have to be combined with RFM modules.

For more detailed information on all of the RFID products from Texas Instruments, please visit [www.ti-rfid.com](http://www.ti-rfid.com).

# TI Worldwide Technical Support

## Internet

### TI RFID Product Information Center

#### Homepage

[www.ti.com/rfid](http://www.ti.com/rfid)

### US and Canada Product Information Center

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Mon. 8:00 am - 5:00 pm

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