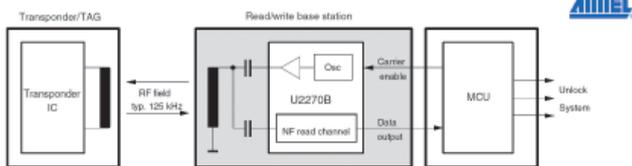


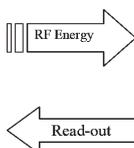
U 2270 B-MFPY



- Carrier Frequency fosc 100 kHz - 150 kHz, typical Data Rate up to 5 kbaud at 125 kHz
- Suitable for Manchester and Bi-phase Modulation
- Power Supply from the Car Battery or from 5-V Regulated Voltage
- Optimized for Car Immobilizer Applications
- Tuning Capability
- Microcontroller-compatible Interface
- Low Power Consumption in Standby Mode
- Power-supply Output for Microcontroller

Part No.	Ord.No.
S U 2270 B-MFPY	4838

RFID Readers CTU Series



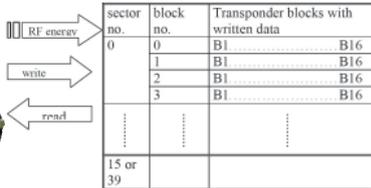
Byte no.	Unique transponder
1	ID1 (8 bytes)
2	ID2 (8 bytes)
3	ID3 (8 bytes)
4	ID4 (8 bytes)
5	ID5 (8 bytes)
6	Parity 1 (8 bytes)
8	Parity 2 (6 bytes)

CTU module operates on principle of the contactless unique data acquiring from UNIQUE (RFID) transponders. Data is processed suitably and next transmitted in serial form to the master unit. Additionally indication LED can be connected to the reader signaling successful reading information from transponder and power-on indicating LED. Buzzer located on board beeps at the moment of reading.

Part No.	CTU-005	CTU232-M	CTU-RWD-M
Supply Voltage	4,5-5,5V	8-13V	5 +/-0,25V
Supply Current	5-55mA		5-75mA
Operating Radio Frequency	125kHz		
Part No. of recieved Data	Manchester		
Baud rate	RF/64 (1953b/s)		
Output Current Capacity	15mA	5mA	
Read-Out Distance	8-10cm	up to 12cm	
Max. Read-Out Frequency	2 read-outs/sec	5 read-outs/sec	
Data transmission parameters to the master unit	9600b/s, 8data bits, 1 stop bit, no parity bit		
	TTL levels	RS232C	RS-TTL, Wiegand, Dallas

Part No.	Ord.No.
S TR READER CTU005	55409
S TR READER CTU232-M	55413
S TR READER CTU-RWD-M	55414

MM-U57D READER

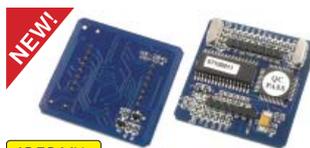


MM-U57D module is a device, which operates on basis of non-contact data reading and writing from and to the Mifare® transponder (RFID). The module is operated via RS-232 interface on voltage levels conforming TTL. The device operates on basis: Query (from master device - host) - action (of module) - response (of module).

Part No.	MM-U57D-Reader
Supply voltage	4.5...5.5 V
Maximum Supply Current	1...55 mA
Operation Frequency	13.65 MHz
Read distance of transponders	5...10 cm
Antenna	External, including resonance capacitors for 13.56 MHz frequency.
RS-485 transmission	2400, 4800, 9600, 19200, 38400, 57600, 115200 bit/s, 8 data bits, 1 stop bit, no parity

Part No.	Ord.No.
S MM-U57D READER	72647

SB 2240 MC



SB2230,2240 Philips Mifare Reader/Writer Module

Part No.	SB 2240 MC
RFID Technology	Philips Mifare
Operating Voltage	5VDC
Operating Current	120mA
Operating Temperature	0°C to 70°C
Operating Frequency	13.56MHz
Reading Range	Int. ant. 4.5cm, Ext. ant. 8cm
Read Card Reponse Time	less than 0.1sec
Dimensions (mm)	40 x 40 x 11
ISO Standard	ISO14443A
Communication setting	9600,8,1,N(Can be customized)

Part No.	Ord.No.
S MM-U57D READER	72647

ID Series



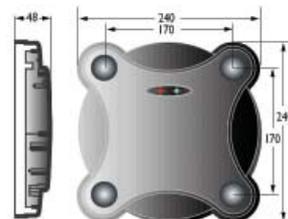
The ID2, ID12 and ID20 are similar to the obsolete ID0, ID10 and ID15 MK(ii) series devices, but they have extra pins that allow Magnetic Emulation output to be included in the functionality. The ID-12 and ID-20 come with internal antennas, and have read ranges of 12+ cm and 16+ cm, respectively. With an external antenna, the ID-2 can deliver read ranges of up to 25 cm. All three readers support ASCII, Wiegand26 and Magnetic ABA Track2 data formats.

Part No.	ID-2	ID-12	ID-20
Read Range	N/A (no int. antenna)	12+ cm	16+ cm
Dimensions	21 x 19 x 6 mm	26 x 25 x 7 mm	40 x 40 x 9 mm
Frequency	125 kHz		
Card Format	EM 4001 or compatible		
Encoding	Manchester 64-bit, modulus 64		
Power Requirement	5 VDC@13mA	5 VDC @ 30mA	5 VDC @ 65mA
I/O Output Current	+/-200mA PK	-	-
Voltage Supply Range	+4.6V through +5.4V		

Part No.	Ord.No.
S ID 12	54214
S ID 2 + ANT	69365
S ID 20	54215

EM Series

EM 80



The EM80 is an advanced reader for the popular EM4001 format 125KHz tags. It can be used on ISO card with Read range of over 70 cm.

Part No.	EM 80
Power Input	12V DC
Current Consumption	0,2A
Frequency	125kHz
Read Range	over 70cm wit ISO cards
Interfaces	RS232 (9600,n,8,1) and Wiegand 26/34
transponder	Read-only 64bits, Manchester encoded
Auto-Tune	Internal upon switch-on and everu 10 minutes
Read Indication	LED and RS232 connection

Part No.	Ord.No.
S EM 80	64639