



Key features

- EPC Global UHF Class 1 Gen 2 / ISO18000-6C standard
- Power output max: +33dBm
- 4 antennas
- Bluetooth communication
- OEM developer' kit available

The M-2800 BT is a high performance 4-channel reading and writing module compliant with EPC Global UHF Class 1 Gen 2 / ISO18000-6C standard.

It enables adding RFID UHF to mobile and fixed readers for various applications (logistics, industrial automation...). The communication with any device is made easy with the Bluetooth which it is equipped with.

This module developed with INDY R2000 chip transmits up to 33dBm and is able to read 700 tags/sec.

Depending on your project, the M-2800 module has 2 inventory modes: buffer mode and real-time mode. In buffer mode, detected tag is stored in buffer. This mode improves the efficiency of multi tag inventory. In real time mode, detected tag is send the data in real time. This mode allows user to get tag's data instantly.



Option 1 : OEM version for machine integration



Option 2 : within IP67 casing

V1.2
Non-contractual datasheet

Physical specifications

Dimensions	70,2 x 51 x 8.2mm
Body material	Gold-plated brass
Shield Material	Aluminum

General specifications

Air Interface protocol	EPC Global UHF Class 1 Gen 2 / ISO18000-6C	ISO 18000-6B
Spectrum range	EU: 865MHz-868MHz or US: 902-928MHz	
RF transceiver	Indy R2000	
RF channel	4 channels	
RF connector	SMA	
Interface connector	Molex 53261-1571	
Working mode	Single/DRM	
Output Power	0 - 33dBm	
Output Power precision	+/- 1dBm	
Output power flatness	+/- 0.2 dBm	
Receive Sensitivity	<-85dBm	
Peak Inventory Speed	>700 tags/sec	
Tag buffer capacity	1000 tags at 96 bit EPC	
Host communication	RS232 port	
Input Voltage	3.7V – 5V	
DK Input Voltage	12V - 18V	
Standby Mode Current	< 30mA	
Sleep mode Current	< 100mA	
Max operating current	Conditions : @5V (33dbm Output, Multi-tag, 25°C) Min : 300 mA Typ : 1.3A +/-10% Max : 2.5 A	
Max Baud rate	115200 bps	
Heat Dissipation	Air cooling	
Tag RSSI	Supported	
Antenna detector	Supported	
Ambient Temp monitor	Supported	

Communication interface

Bluetooth	4.2
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User environment

Operating Temp.	-20°C~+55°C
Storage Temp.	-20°C~+55°C
Humidity	<95% (+25°C)

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