Technical Data RF260R – Short Form

<u>Remarks:</u> The RF260R manual does not yet exist, even in German language. The RF260R manual, once completed, will contain detailed information about field-data, range for certain tags, information about how to implement the RF260R in a production site with communication modules. This detailed information may not be much relevant for RF260R FCC approval.

Below given are short system overview and technical data which are required in order to run the RF260R for testing and to check the reader's function.



RF200 System overview

SIMATIC RF200 is an inductive identification system, based on the standard ISO 15693, which was specially designed for industrial production for controlling and optimization material flow.

Contrary to SIMATIC RF300, SIMATIC RF200 is designed for RFID applications for lower demands on performance (data volume, data transfer speed, diagnostics). SIMATIC RF200 is a low-price RFID system.

Component	Description	
Communications Modules	Integration of an RFID Identification system is achieved by a communications module.	
Reader	The reader achieves the communication with the tag and provides the tag with energy by the reader's magnetic field. The reader also interfaces to various modules (i.e. SIMATIC S7 via ASM 475).	
Тад	The RFID-tag stores all data relevant for production and is used as a substitute for optical barcode-tags.	

System components	
Communications modules	• ASM 456
	 ASM 475 (S7 300/ ET 200M)
	• RF160C
	• RF170C
	• RF180C
	• RF182C
Tags	• MDS D100
	MDS D200
	• MDS D124
	• MDS D139
	• MDS D160
	• MDS D324
	• MDS D421
	• MDS D424
	• MDS D428
	• MDS D460

Overview of System Components compatible with RF260R

Technical Data RF260R (short form)

Inductive interface (magnetic field) to transponder			
(tag). Carrier frequency for energy / data	13,56 MHz Integrated loop		
Antenna			
Interface to communications module	RS422		
Baud rate	19200, 57600, 115200 Baud		
Functions	Initialize tag, read tag, write on tag, get status data, antenna on/off, read tag serial number		
DC-Voltage (nominal)	24 V DC		
Display elements	2-color-LED (operating voltage, presence, error)		
Connector	M12 (8-pin.)		
Housing			
Dimensions (in mm)	• 75 x 75 x 41 (without M12 device connector)		
Color	anthracite		
Material	PA6.6-GF35 (Ultramid A3WG7)		
Fixing	2 Screws, M5 type		
Degree of protection to EN 60529	IP67		
Weight	200 g		
Current consumption	40mA		

Pin assignment RF260R (RS422 interface)

M12 connector (male)	Pin No. M12 plug	Pin
	1	+24V
	2	-TX
	3	0V (GND)
	4	+TX
	5	+RX
	6	-RX
	7	Not used (free)
	8	PE / shield

LED indicator (display elements) RF260R

LED colour		Meaning
green	flashing	Operating voltage available, reader NOT initialized
	Permanently on	Operating voltage available. Reader initialized.
yellow		Tag in field (tag presence)
red (flashing)		Errors according to error code table.
red (permanently on)		Fatal error

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

RF260R housing and dimensions



