



INDUSTRIAL RFID

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⦿ HF Tag

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Industry application

Automobile

RFID products have been widely used in the production of automotive parts and automotive manufacturing process segments. Large number of parts production management and complex manufacturing processes, RFID from the source quickly improve the efficiency of



New Energy Battery

RFID completes the automatic identification of the core bin on the power battery production line, and uses the real-time information collected from the bin to complete the transmission of the core parameters, the grading of the core voltage, and the real-time pushing of the process guidance.



Appliance/3C

Real-time data acquisition of production process and automatic identification of material data, automatic transfer of process parameters and test procedures of each station are realized by RFID system, so as to achieve the goal of priority of production line rhythm control and line balance rate.



Warehousing Logistics

RFID technology can automatically collect data from warehouse distribution, warehousing, warehousing, warehousing, warehousing, inventory and other operation links to ensure the speed and accuracy of data input in logistics and supply chain management links.



Industry application

Tobacco

A major feature of tobacco production is the diversification of raw materials and products. Different materials, accessories and finished products will share the corresponding storage. Therefore, in the automatic control of tobacco production, the application of RFID is indispensable to the logistics system of tobacco stack, tobacco stack, excipient stack, filter rod stack and finished product stack.



Metallurgy

RFID system also has very important applications in metallurgical industry, such as roll management, ladle tracking, coil positioning, bar and wire positioning, which greatly improves production efficiency.



RFID

AGV

The RFID reader identifies the RFID landmark tag on the track node to select the site for feeding. The RFID landmark label with site tag is installed at the rail node of the material delivery route, and the truck stops at the selected site according to the feeding route.



Other

Machinery and equipment manufacturing, transportation technology, packaging industry, printing industry, paper and finishing, airport baggage sorting, mail package processing, library management, access control system, electronic tickets, animal identification, three-meter pre-charging system, etc.



RFID Coupler, HF Reader and Tag

GSEE-TECH RFID module can connect 4-channel high-frequency RFID reader

integrating 8-channel digital input/output signals.

Support PROFINET, EtherNet/IP, EtherCAT, MODBUS TCP, DeviceNet,

PROFIBUS-DP and other industrial protocols.To meet the control needs of SIEMENS,

AB, BECKHOFF, OMRON, Schneider , Mitsubishi and other brands.



GSEE-TECH HF RFID Reader,integrated design (K95, P40, M30T, M18T),compact structure.Built-in filter isolation module, with strong anti-interference ability, support high-speed identification and fast data transmission performance.

- Standard : ISO-15693
- Frequency : 13.56MHz
- Antenna : Integrated antenna
- Protection grade : IP67
- Working temperature : -25°C...+70°C

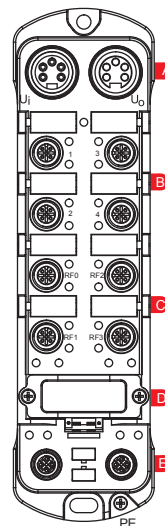
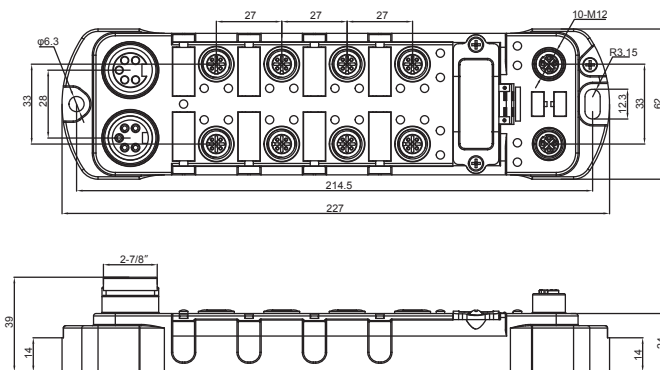


GSEE-TECH provide a variety of high-frequency RFID carrier products, such as general-purpose, high-temperature, metal-resistant, etc. In recognition station reader, information is read or written to the tag according to the upper instruction,so as to realize the corresponding logistics sorting, workpiece identification and production line process control.

- Compliance with ISO-15693 protocol, working frequency 13.56 MHz
- High sensitivity and strong anti-interference ability
- IP67/IP68 protection level, adapted to harsh environment.
- It can penetrate non-metallic materials without visible reading and writing.



GX Series RFID Gateway Shape and Installation Data



- Coupler port definition
- A Power interface
 - B I/O interface(C1-C4)
 - C RFID interface(RF0-RF3)
 - D Address dialing code
 - E Communication port

- PROFINET Coupler
- Connectible 4 x RFID Reader
- MRP Ring
- System power supply and load power supply independently
- Short circuit, overload, reverse connection protection
- Each channel independent diagnosis, independent protection



Basic Data

PROFINET Interface	
Protocol	PROFINET IO
Connection	2 x M12 (D-Code) , Integrated switch function
Physical layer	Ethernet
Transmission rate	10/100Mbps, full duplex
Characteristic	IRT、MRP、LLDP/DCP、PTCP
Alarm function	Diagnose alarm, process alarm, insert connector alarm
Minimum cycle time	250µsec.
IRT delay	<3µsec.

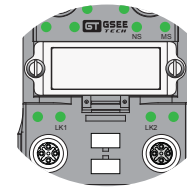
Power Interface	
Connection	7/8" ; 5-Pin ; UB Max.9A , ULMax.9A
Supply voltage	24VDC (18...30VDC)
Operating current	<150mA

RFID Interface	
Extension protocol	RS485
Connection	4 x M12 A-code
RFID extended	Connectible 4 x RFID Reader
Read and write mode	Supporting 4-channel simultaneous parallel fast reading and writing
Communication distance	Max.50m between the module interface and reader

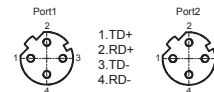
I/O Channels	
Inout/Output	8-channel, adaptive I/O
Connection	4 x M12 A-coding
Input signal	3-wire sensors ,pnp , or mes. switches 18...30 VDC <200 mA , Short circuit protection
Output signal	18...30 VDC 0.5 A , Short circuit protection

LED-indication	
PWR	Green : OK Red : UL failure
MS	Green : OK Red : Module failure
NS	Green : OK Flashing green : PLC in STOP state Flashing red : IP address not set Off : No connection with PLC
LINK	Quickly flashing green : Ethernet link established,communication present Slowly flashing red : Ethernet link established,no communication present off : No link
I/O	Green : Input or output active Red : Fault
RFID	Green : OK Red : Channel fault

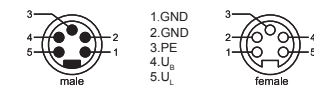
Ordering data	
Type	GXPI-DIO8-4RF
Protocol	PROFINET IO
Describe	IP67 Protection , working temperature: -30~70°C Specification size : 227(D)x62(W)x39(H)mm



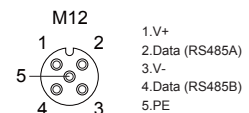
M12 D-coded Female, PROFINET Port 1/2 connection



7/8" connector for power supply,
U_B :System power , U_L :Load power



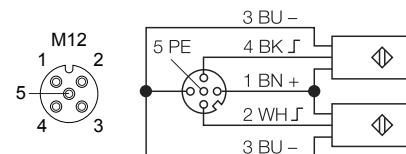
M12 D-coded RFID1/2/3/4 connection



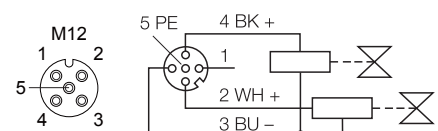
I/O address distribution table

Byte	Bit0	Bit1	Bit2	Bit3	Bit4	Bit5	Bit6	Bit7
0	C1P4	C1P2	C2P4	C2P2	C3P4	C3P2	C4P4	C4P2

M12 A-coded I/O-port input signals(C1-C4)



M12 A-coded I/O-port Output signals(C1-C4)



EtherNET/IP RFID Module

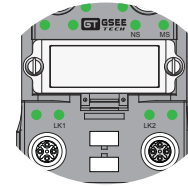
- EtherNET/IP Coupler
- Connectible 4 x RFID Reader
- Support DLR
- Integrated Ethernet switch function
- Short-circuit/overload/reverse polarity protection @ each channel
- IP67 Protection degree



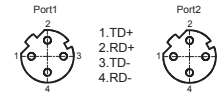
EtherNET/IP

Basic Data

EtherNET/IP Interface	
Protocol	EtherNET/IP
Connection	2 x M12 (D-Code) , Integrated switch function
Physical layer	Ethernet
Transmission rate	10/100Mbps, full duplex
IP address/DHCP	Through software Setting or rotating switch
Config example	Input : 100 ; Output : 150 ; Config : 0
Alarm function	Diagnose alarm, process alarm, insert connector alarm
QC	<500ms
DLR	Support
Power Interface	
Connection	7/8" ; 5-Pin ; UB Max.9A , ULMax.9A
Supply voltage	24VDC (18...30VDC)
Operating current	<150mA
RFID Interface	
Extension protocol	RS485
Connection	4 x M12 A-coding
RFID extended	Connectible 4 x RFID Reader
Read and write mode	Supporting 4-channel simultaneous parallel fast reading and writing
Communication distance	Max.50m between the module interface and reader
I/O Channels	
Inout/Output	8-channel, adaptive I/O
Connection	4 x M12 A-coding
Input signal	3-wire sensors ,pnp , or mes. switches 18...30 VDC <150 mA , Short circuit protection
Output signal	18...30 VDC 0.5 A , Short circuit protection
LED indication	
PWR	Green : OK Red : U _L load power failure
MS	Green : Module OK Red : Major fault (Exception-state , Fatal error)
NS	Green : Online, one or more connections established Green, flashing : Online, no connections established Red, flashing : One or more connections timed-out
LINK	Green/Yellow : Link (100 Mbit/s) /Link (10 Mbit/s) established Green/Yellow,flashing : Activity (100 Mbit/s)/(10 Mbit/s) OFF : No link, no activity
I/O	Green : Input or output active Red : Fault
RFID	Green : OK Red : Channel fault
Ordering data	
Type	GXEI-DIO8-4RF
Protocol	EtherNET/IP
Describe	Specification Size: 227(D)x62(W)x39(H)mm



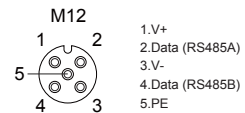
M12 D-coded Female, ETHERNET Port 1/2 connection



7/8" connector for power supply,
U_B :System power , U_L :Load power



M12 D-coded RFID1/2/3/4 connection

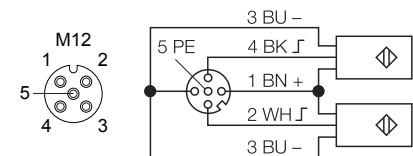


x100	x10	x1	0	- DHCP	
			1 ... 254	- IP Address 192.168.0.xxx	
			255	- DHCP	

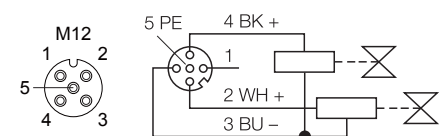
I/O address distribution table

Byte	Bit0	Bit1	Bit2	Bit3	Bit4	Bit5	Bit6	Bit7
0	C1P4	C1P2	C2P4	C2P2	C3P4	C3P2	C4P4	C4P2

M12 A-coded I/O-port input signals(C1~C4)



M12 A-coded I/O-port Output signals(C1~C4)



- EtherCAT Coupler
- Connectible 4 x RFID Reader
- 2xM12100, BASE-TX, Distributed clock
- System power supply and load power supply independently
- Short circuit, overload, reverse connection protection
- Each channel independent diagnosis independent protection



Basic Data

EtherCAT Interface	
Protocol	EtherCAT
Connection	2 x M12 D-code
Physical layer	Ethernet
Transmission rate	100Mbps
Address	Software distributes address automatically
Distributed clock	Support
EtherCAT function	Modular description, CoE emergency message, automatic mapping

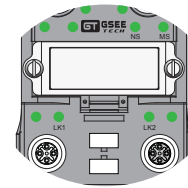
Power Interface	
Connection	7/8" ; 5-Pin ; UB Max.9A , ULMax.9A
Supply voltage	24VDC (18...30VDC)
Operating current	<150mA

RFID Interface	
Extension protocol	RS485
Connection	4 x M12 A-code
RFID extended	Connectible 4 x RFID Reader
Read and write mode	Supporting 4-channel simultaneous parallel fast reading and writing
Communication distance	Max.50m between the module interface and reader

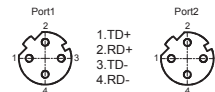
I/O Channels	
Inout/Output	8-channel, adaptive I/O
Connection	4 x M12 A-coding
Input signal	3-wire sensors ,pnp , or mes. switches 18...30 VDC <150 mA , Short circuit protection
Output signal	18...30 VDC 0.5 A , Short circuit protection

LED-indication	
PWR	Green : OK Red : UL load power failure
RUN	Off :Non-working status Green :Operational status
LINK	Off : No link Flashing green:Link OK, communication established Green:Link OK, no communication
I/O	Green: Input or output active Red:Fault
RFID	Green : Channel OK Red : Channel Fault

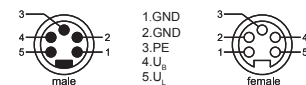
Ordering data	
Type	GXEC-DIO8-4RF
Protocol	EtherCAT
Describe	IP67 Protection , working temperature: -30~70°C Specification size : 227(D)x62(W)x39(H)mm



M12 D-coded Female, ETHERCAT Port 1/2 connection

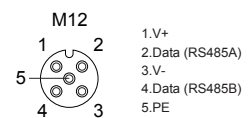


7/8" connector for power supply,
U_B :System power , U_L :Load power



RFID

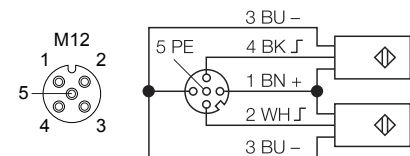
M12 D-coded RFID1/2/3/4 connection



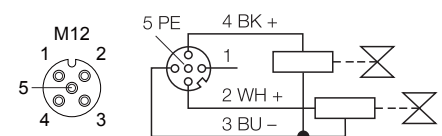
I/O address distribution table

Byte	Bit0	Bit1	Bit2	Bit3	Bit4	Bit5	Bit6	Bit7
0	C1P4	C1P2	C2P4	C2P2	C3P4	C3P2	C4P4	C4P2

M12 A-coded I/O-port input signals(C1~C4)



M12 A-coded I/O-port Output signals(C1~C4)



MODBUS TCP RFID Module

- MODBUS TCP Slave
- Connectible 4 x RFID Reader
- Integrated Ethernet switch function
- System power supply and load power supply independently
- Short-circuit/overload/reverse polarity protection @ each channel
- IP67 Protection degree



Basic Data

MODBUS Interface	
Protocol	Modbus TCP/IP
Connection	2 x M12 (D-Code) , Integrated switch function
Physical layer	Ethernet
Transmission rate	10/100Mbps, full duplex
TCP connections	4
Support function code	1 , 2 , 3 , 4 , 5 , 6 , 15 , 16 , 22 , 23
Listen port	502
Address Settings	Through rotating switch/Software setting

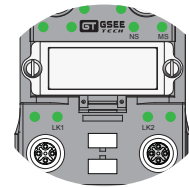
Power Interface	
Connection	7/8" ; 5-Pin ; UB Max.9A , ULMax.9A
Supply voltage	24VDC (18...30VDC)
Operating current	<150mA

RFID Interface	
Extension protocol	RS485
Connection	4 x M12 A-code
RFID extended	Connectible 4 x RFID Reader
Read and write mode	Supporting 4-channel simultaneous parallel fast reading and writing
Communication distance	Max.50m between the module interface and reader

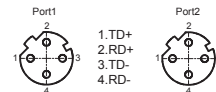
I/O Channels	
Inout/Output	8-channel, adaptive I/O
Connection	4 x M12 A-coding
Input signal	3-wire sensors ,pnp , or mes. switches 18...30 VDC <150 mA , Short circuit protection
Output signal	18...30 VDC 0.5 A , Short circuit protection

LED-indication	
PWR	Green : OK Red : U _L load power failure
MS	Green : Module OK Red : Major fault (Exception-state , Fatal error)
NS	Green : At least one Modbus message received Green,flashing : Waiting for first Modbus message Red : IP address conflict detected,Fatal error
LINK	Green/Yellow : Link (100 Mbit/s) /Link (10 Mbit/s) established Green/Yellow,flashing : Activity (100 Mbit/s)/(10 Mbit/s) OFF : No link, no activity
I/O	Green : Input or output active Red : Fault
RFID	Green : Channel OK Red : Channel Fault

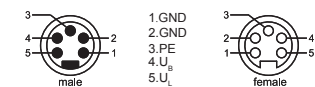
Ordering data	
Type	GXEN-DIO8-4RF
Protocol	MODBUS TCP/IP
Describe	IP67 Protection , working temperature: -30~70°C Specification size : 227(D)x62(W)x39(H)mm



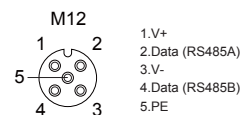
M12 D-coded Female, MODBUS Port 1/2 connection



7/8" connector for power supply,
U_B :System power , U_L :Load power



M12 D-coded RFID1/2/3/4 connection

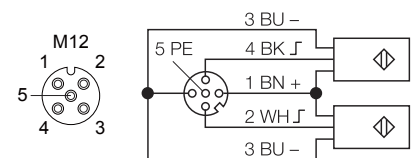


x100	x10	x1	0	- DHCP	
			1 ... 254	- IP Address 192.168.0.xxx	
			255	- DHCP	

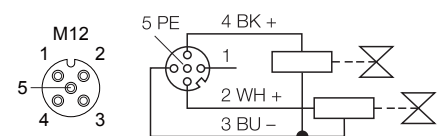
I/O address distribution table

Byte	Bit0	Bit1	Bit2	Bit3	Bit4	Bit5	Bit6	Bit7
0	C1P4	C1P2	C2P4	C2P2	C3P4	C3P2	C4P4	C4P2

M12 A-coded I/O-port input signals(C1~C4)



M12 A-coded I/O-port Output signals(C1~C4)



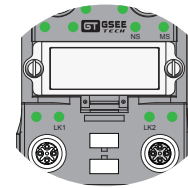
- DEVICENET Coupler
- Connectible 4 x RFID Reader
- Transmission Technology: CAN
- System power supply and load power supply independently
- Short-circuit/overload/reverse polarity protection @ each channel
- IP67 protection degree



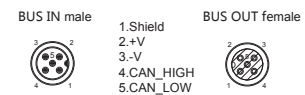
DeviceNet

Basic Data

DEVICENET Interface	
Protocol	DeviceNET
Connection	2 x M12 A-coded
Physical layer	CAN
Transmission rate	125/250/500 kbps,Auto
Address range	0...63
Alarm function	Diagnostic alarm, process alarm, plug-and-pull connector alarm
Address setting mode	2 x Decimal rotating switch
Terminal resistance	External
Power Interface	
Connection	7/8" ; 5-Pin ; UB Max.9A , ULMax.9A
Supply voltage	24VDC (18...30VDC)
Operating current	<150mA
RFID Interface	
Extension protocol	RS485
Connection	4 x M12 A-code
RFID extended	Connectible 4 x RFID Reader
Read and write mode	Supporting 4-channel simultaneous parallel fast reading and writing
Communication distance	Max.50m between the module interface and reader
I/O Channels	
Inout/Output	8-channel, adaptive I/O
Connection	4 x M12 A-coding
Input signal	3-wire sensors ,npn , or mes. switches 18...30 VDC <150 mA , Short circuit protection
Output signal	18...30 VDC 0.5 A , Short circuit protection
LED-indication	
PWR	Green:OK OFF:U _L load power failure
MS	OFF : Not operating Green:OK Green, flashing : Configuration error Red : Module failure (unrecoverable) Red, flashing : Module failure (recoverable)
NS	OFF:Not online/ No network power Green: Online,one or more connections established Green, flashing : Online, no connections established Red: Network failure Red, flashing : One or more connections timed-out Alternating Red/Green : self-inspection
I/O	Green : Input or output active Red : Fault
RFID	Green : Channel OK Red : Channel Fault
Ordering data	
Type	GXDN-DIO8-4RF
Protocol	DeviceNET
Describe	IP67 Protection , working temperature: -30~70°C Specification size : 227(D)x62(W)x39(H)mm

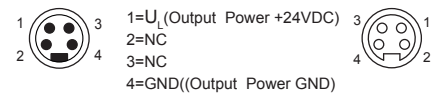


M12 A-coded , DEVICENET Port 1/2 connection

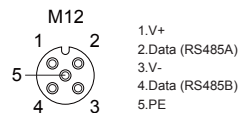


U_L :Load power

7/8" connector for load power supply



M12 D-coded RFID1/2/3/4 connection



Node address : 0 ... 64

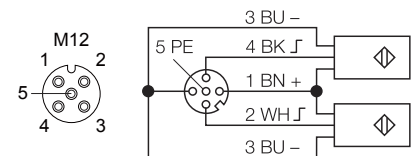
Transmission rate setting



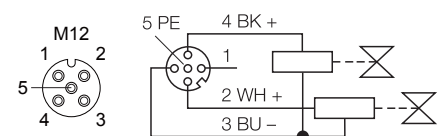
I/O address distribution table

Byte	Bit0	Bit1	Bit2	Bit3	Bit4	Bit5	Bit6	Bit7
0	C1P4	C1P2	C2P4	C2P2	C3P4	C3P2	C4P4	C4P2

M12 A-coded I/O-port input signals(C1~C4)



M12 A-coded I/O-port Output signals(C1~C4)



PROFIBUS-DP RFID Module

- PROBUS-DP Coupler
- Connectible 4 x RFID Reader
- Support DP-V1
- System power supply and load power supply independently
- Short circuit, overload, reverse connection protection
- Each channel independent diagnosis, independent protection



Basic Data

PROFIBUS-DP Interface	
Protocol	PROFIBUS-DP
Connection	2 x M12 B-code
Physical layer	RS485
Transmission rate	9.6 Kbaud ~ 12 Mbaud , automatic detection
Address range	0...99
Alarm function	Diagnostic alarm, process alarm, plug-and-pull connector alarm
Address setting mode	2 x Decimal rotating switch
Terminal resistance	External

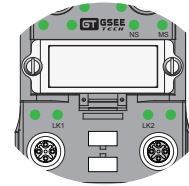
Power Interface	
Connection	7/8" ; 5-Pin ; UB Max.9A , ULMax.9A
Supply voltage	24VDC (18...30VDC)
Operating current	<150mA

RFID Interface	
Extension protocol	RS485
Connection	4 x M12 A-code
RFID extended	Connectible 4 x RFID Reader
Read and write mode	Supporting 4-channel simultaneous parallel fast reading and writing
Communication distance	Max.50m between the module interface and reader

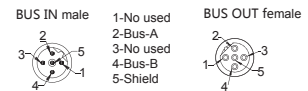
I/O Channels	
Inout/Output	8-channel, adaptive I/O
Connection	4 x M12 A-coding
Input signal	3-wire sensors ,pnp , or mes. switches 18...30 VDC <150 mA , Short circuit protection
Output signal	18...30 VDC 0.5 A , Short circuit protection

LED-indication	
PWR	Green : OK Red : UB failure
BUS	OFF : OK Red : UL failure
ERR	Green : OK Red : PLC stop or communication failure
I/O	Green : Input or output active Red : Fault
RFID	Green : Channel OK Red : Channel Fault

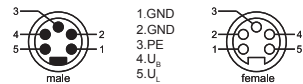
Ordering data	
Type	GXDP-DIO8-4RF
Protocol	PROFIBUS-DP
Describe	IP67 Protection , working temperature: -30~70°C Specification size : 227(D)x62(W)x39(H)mm



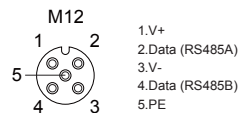
M12 B-coded , PROFIBUS-DP Port 1/2 connection



7/8" connector for power supply,
U_B :System power , U_L :Load power



M12 D-coded RFID1/2/3/4 connection



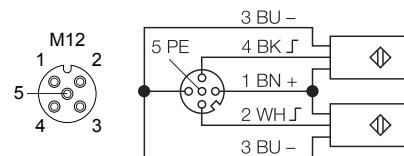
Node address : 0 ... 99



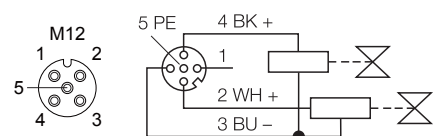
I/O address distribution table

Byte	Bit0	Bit1	Bit2	Bit3	Bit4	Bit5	Bit6	Bit7
0	C1P4	C1P2	C2P4	C2P2	C3P4	C3P2	C4P4	C4P2

M12 A-coded I/O-port input signals(C1~C4)



M12 A-coded I/O-port Output signals(C1~C4)



Module information



Technical parameter

Specification parameter

RFID standard	ISO-15693			
Frequency	13.56MHz			
Antenna	Integrated antenna			
Output power	23dBm			
Wireless rate	26.5kbit/s			
Read and write distance	0~150mm	0~100mm	0~60mm	0~40mm
Communication interface	M12 A-coding RS485			
Communication rate	115200bit/s			
Voltage and current	18~30VDC, <90mA			
Indicator light	Power , TAG		TAG	

Physical parameter

Outline size	104X115X35mm	40X40X67mm	φ30X75mm	φ18X80mm
Weight	0.35 kg	0.12 kg	0.11 kg	0.05 kg
Fixed type	4 x fixed holes, screw fixed	2 x fixed holes, screw fixed	nut fixed , 1.5 pitch	nut fixed , 1 pitch
Shell material	PC+ABS	PC+ABS	Chromium plated on brass	
Shell color	Black	Black	Black+Silvery white	

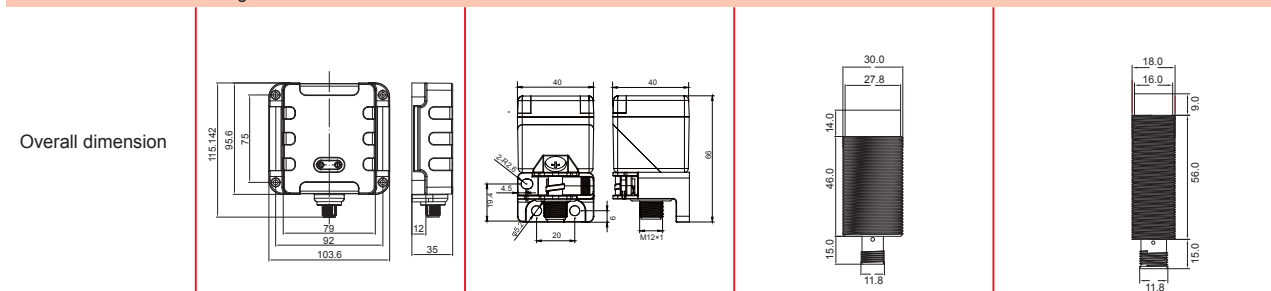
application environment

Working temperature	-25°C~+70°C			
Storage temperature	-25°C~+85°C			
Working humidity	5%~95%RH (No condensation)			
Protection grade	IP67			
Impact resistance	GB/T 2432.10-2008/IEC	60068-2-6 : 1995		
Authentication	CE			
Enclosure	Connectors, cables, etc.			

Ordering data

Type	GRH-K95	GRH-P40	GRH-M30T	GRH-M18T
Protocol	RS485			
Read and write distance	0~150mm	0~100mm	0~60mm	0~40mm
Describe	IP67 Protection , working temperature: -25~70°C			

Mechanical Dimension Diagram




Overall dimension

RFID HF Tag

Tag parameter				
HF General Tag				

Specification parameter				
Type	DMR10-B128	DMR10-K2	DR20-B128	DR20-K2
Frequency	13.56MHz		13.56MHz	
Wireless standard	ISO15693		ISO15693	
Storage class	128 byte EEPROM	2048 byte FRAM	128 byte EEPROM	2048 byte FRAM
Storage capacity	112 byte	2000 byte	112 byte	2000 byte
Working mode	Support static and mobile read and write functions		Support static and mobile read and write functions	
Repetitive reading	Unrestricted		Unrestricted	
Repetitive writing	10 ⁵	Unrestricted	10 ⁵	Unrestricted
Read and write distance	Max100mm, depending on reader power, application mode		Max200mm, depending on reader power, application mode	
Fixed type	Embedded and Adhesive		Embedded and Adhesive	
Installation Material	Glass, wood, plastic, metal and other materials		Glass, wood, plastics and other non-metallic materials	
Outline size	φ10*4.5mm		φ20*3mm	
Shell material	PBT		PPA	
Shell color	Black		Black	
Protection grade	IP67		IP68	
Testing environment	20°C , 100h		20°C , 100h	
Vibration test	IEC 68.2.6 (10g, 10...2000Hz, 3 axis, 2.5h)		IEC 68.2.6 (10g, 10...2000Hz, 3 axis, 2.5h)	
Impact test	IEC 68.2.29 (40g, 18ms, 6 axis ,2000 times)		IEC 68.2.29 (40g, 18ms, 6 axis ,2000 times)	
Axial/radial force	800N/500 N – 10 sec.		800N/500 N – 10 sec.	
Working temperature	-25°C~75°C		-25°C~90°C	
Storage temperature	-40°C~85°C		-40°C~85°C	
High temperature	—		140° C (100h)	

Tag parameter				
HF General Tag				

Specification parameter				
Type	DR30-B128	DR30-K2	DR50-B128	DR50-K2
Frequency	13.56MHz		13.56MHz	
Wireless standard	ISO15693		ISO15693	
Storage class	128 byte EEPROM	2048 byte FRAM	128 byte EEPROM	2048 byte FRAM
Storage capacity	112 byte	2000 byte	112 byte	2000 byte
Working mode	Support static and mobile read and write functions		Support static and mobile read and write functions	
Repetitive reading	Unrestricted		Unrestricted	
Repetitive writing	10 ⁵	Unrestricted	10 ⁵	Unrestricted
Read and write distance	Max340mm, depending on reader power, application mode		Max500mm, depending on reader power, application mode	
Fixed type	Embedded 、 Adhesive、 Nonmetallic screw		Embedded 、 Adhesive、 Nonmetallic screw	
Installation Material	Glass, wood, plastics and other non-metallic materials		Glass, wood, plastics and other non-metallic materials	
Outline size	φ30*3mm		φ50*3mm	
Fixed hole	5.2mm		5.2mm	
Shell material	PPA		PPA	
Shell color	Black		Black	
Protection grade	IP68		IP68	
Testing environment	20°C , 100h		20°C , 100h	
Vibration test	IEC 68.2.6 (10g, 10...2000Hz, 3 axis, 2.5h)		IEC 68.2.6 (10g, 10...2000Hz, 3 axis, 2.5h)	
Impact test	IEC 68.2.29 (40g, 18ms, 6 axis ,2000 times)		IEC 68.2.29 (40g, 18ms, 6 axis ,2000 times)	
Axial/radial force	800N/500 N – 10 sec.		800N/500 N – 10 sec.	
Working temperature	-25°C~85°C		-25°C~85°C	
Storage temperature	-40°C~85°C		-40°C~90°C	
High temperature	140° C (100h), 160° C (50h), 220° C (30min)		140° C (100h), 160° C (50h), 220° C (30min)	

Tag parameter

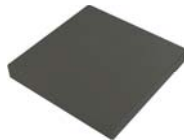
HF Anti-metal
Tag

Specification parameter

Type	DMR30-B320	DMR50-B128
Frequency	13.56MHz	13.56MHz
Wireless standard	ISO15693	ISO15693
Storage class	320 byte EEPROM	128 byte EEPROM
Storage capacity	320 byte	112 byte
Working mode	Support static and mobile read and write functions	Support static and mobile read and write functions
Repetitive reading	Unrestricted	Unrestricted
Repetitive writing	10 ⁵	10 ⁵
Read and write distance	Max300mm, depending on reader power, application mode	Max500mm, depending on reader power, application mode
Fixed type	Embedded、Adhesive、Nonmetallic screw	Embedded、Adhesive、Nonmetallic screw
Installation Material	Glass, wood, plastic, metal and other materials	Glass, wood, plastic, metal and other materials
Outline size	φ30*3mm	φ55*13mm
Shell material	PPA	PPA
Shell color	Black	Black
Protection grade	IP68	IP68
Testing environment	20°C, 100h	20°C, 100h
Vibration test	IEC 68.2.6 (10g, 10...2000Hz, 3 axis, 2.5h)	IEC 68.2.6 (10g, 10...2000Hz, 3 axis, 2.5h)
Impact test	IEC 68.2.29 (40g, 18ms, 6 axis, 2000 times)	IEC 68.2.29 (40g, 18ms, 6 axis, 2000 times)
Axial/radial force	800N/500 N – 10 sec.	800N/500 N – 10 sec.
Working temperature	-25°C~85°C	-25°C~85°C
Storage temperature	-40°C~85°C	-40°C~90°C
High temperature	140° C (100h), 160° C (50h), 220° C (30min)	140° C (100h)

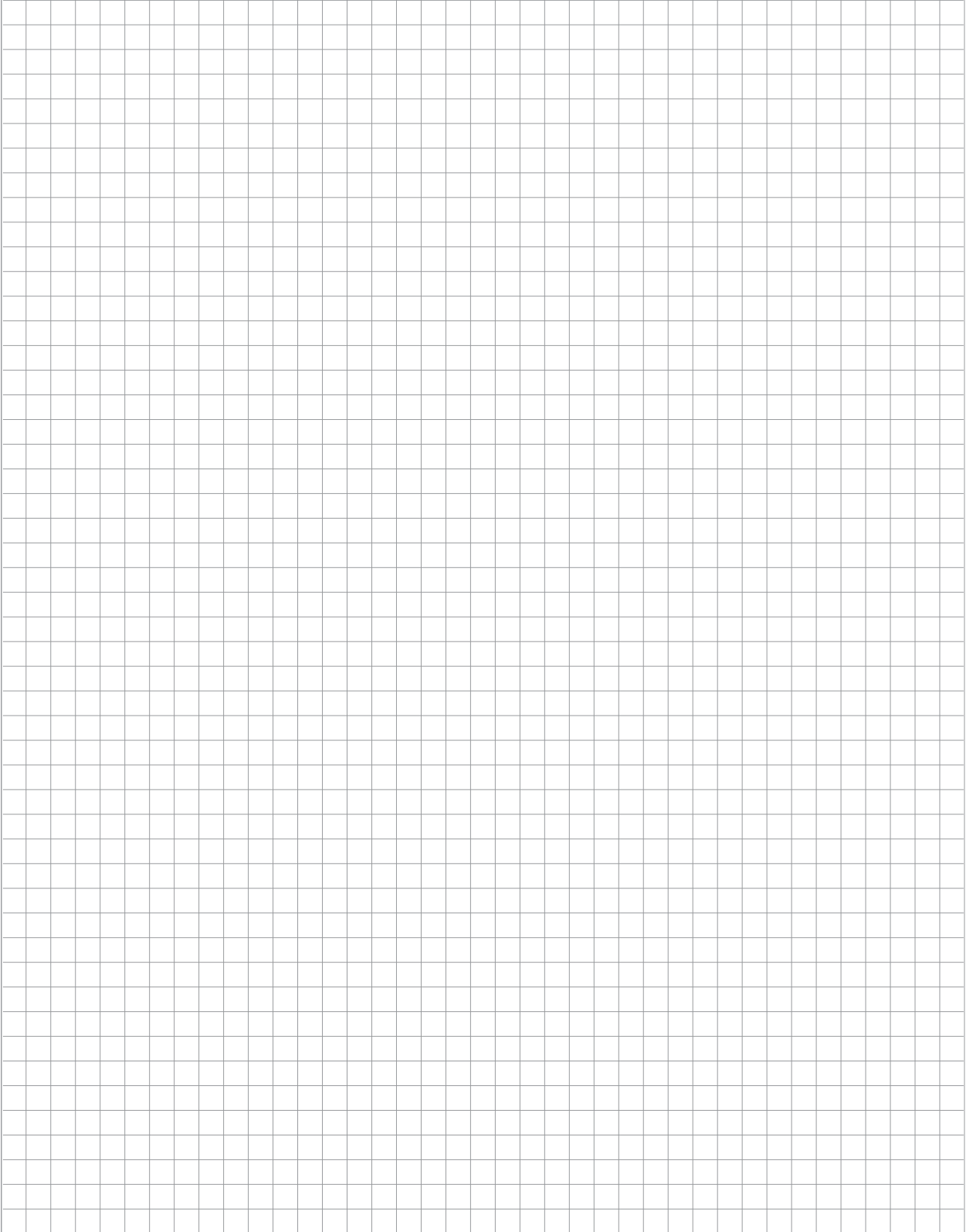
RFID

Tag parameter

HF High
temperature Tag

Specification parameter

Type	DHTQ51-B128
Frequency	13.56MHz
Wireless standard	ISO15693
Storage class	128 byte EEPROM
Storage capacity	112 byte
Working mode	Support static and mobile read and write functions
Repetitive reading	Unrestricted
Repetitive writing	10 ⁵
Read and write distance	Max340mm, depending on reader power, application mode
Fixed type	Embedded、Adhesive、Fixation of accessory parts
Installation Material	Glass, wood, plastics and other non-metallic materials
Outline size	51mm x 51mm x 6.5mm
Shell material	—
Shell color	PPS
Protection grade	Black
Testing environment	IP68
Vibration test	IEC 68.2.6 (10g, 10...2000Hz, 3 axis, 2.5h)
Impact test	IEC 68.2.29 (40g, 18ms, 6 axis, 2000 times)
Axial/radial force	800N/500 N – 10 sec.
Working temperature	-25°C~85°C
Storage temperature	-55°C~185°C
High temperature	200°C (60min), 220°C (45min), 240°C (30min)





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