# **i.timex**™HARDWARE

## 2.4G Radio frequency long-distance parking lot management system



#### **Product Description**

The 2.4G Radio frequency long-distance system combines three active RFIDs with a card issuer and a directional long-distance card reader to meet more diversified needs and realize a convenient and efficient traffic environment. The card reader adopts a 32-bit ARM Cortex-M3 core microcontroller with excellent computing performance, with a maximum recognition speed of 2000 tags per second, allowing the card reader to achieve efficient operation speed. In addition, the card reader is equipped with a high-gain antenna to improve its anti-interference function, this speeds up the recognition of the card when cars are passing through. Nonetheless, the card machine has a wide recognition distance. This improves the success rate of card recognition and saves time.

#### **Main Feature**

- Adopt high-performance 32-bit ARM Cortex-M3 core microcontroller
- Using 18dBi high-gain antenna with fixed orientation, the signal is stable and anti-interference
- 120 meters long distance card reading, the identification is fast and accurate.
- With anti-reread function
- Label recognition speed 2000 tags/sec
- Label reading capability 1000 tags/sec
- Renewal buffer capacity 1000 tags
- Professional waterproof and dustproof materials

### **Product Specification**

#### Card reader





Model	RFR-3480
Processing Unit	32-bit ARM Cortex-M3
Working Frequency	72 MHz
Reading Ability	1000 label/s
Buffer Capacity	1000 label (Anti-reread)
Card Reading Distance	A maximum of 120m
Voltage	12 VDC (7-12 VDC)
Current	≤ 100 mA
Communication Port	Wiegand 26bit 34bit 36bit 44bit RS485 RS232
Working Temperature	-40°C~ +85℃ (Industrial grade)
Storage Temperature	-60°C∼ +85°C
Working Humidity	10% ~ 90% RH
Weight	2.65Kg
Dimension	308 x 308 x 80mm
Floor Stand	RFR-1.3M 1300mm High (Optional)
Antenna	
Wave Frequency Area	2.400-2.480GHz
Gain	18 dBi
Power Directivity	Level: 55° /Vertical: 45°
Polarization Mode	Vertical/Level
Standing Wave Ratio	≤1.5
Standing Wave Ratio Front-to-rear Ratio	≤1.5 ≥24dB
-	
Front-to-rear Ratio	≥24dB
Front-to-rear Ratio Input Resistance	≥24dB 50Ω
Front-to-rear Ratio Input Resistance Lightning Protection	≥24dB 50Ω DC ground
Front-to-rear Ratio Input Resistance Lightning Protection Wind Resistance	≥24dB 50Ω DC ground 80m/s

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Seminary of the second secon	Card issuer	Model	RFR-3475
Summing         Summing           Image: Summing         Communication Port         USB port (can customise different port) Weiken 24bit 34bit 34bit 44bit/RSAB5 / RS232           Image: Summing         Card Format         export multiple export format including BH/10D/AH/8D/AD1/1001           Format Setting         export format through card programming           Working Temperature         -40°C + 85°C (industrial level)           Wave Frequency Area         2400-2480GHz           Card Reading Distance         <20cm		Battery	5VDC (USB electrical supply)
Summer Solution       Weiken 26bit 34bit 34bit 36bit 44bit/RS485 / RS232         Weiken 26bit 34bit 34bit 36bit 44bit/RS485 / RS232       Weiken 26bit 34bit 34bit 36bit 44bit/RS485 / RS232         Image: Solution of the set of th		Current	< 100mA
Sem       Sem       Card Format       export momple export format including         Working Temperature       export format through card programming         Working Temperature       -40°C + 85°C (industrial level)         Wave Frequency Area       2400-2480GHz         Card Reading Distance       <20cm		Communication Port	USB port (can customise different port) Weiken 26bit 34bit 36bit 44bit/ RS485 / RS232
Same       -40°C-+85°C (industrial level)         Warking Temperature       -40°C-+85°C (industrial level)         Ware Frequency Area       2400-2480GHz         Card Reading Distance       -20Cm         Protective Level       IP65         Weight       250g         Dimension       108 x108 x 28mm         Radio frequency card       Model         Working Frequency       2.400-2.480GHz         Recognising Distance       A maximum of 120m         Distance Control       can switch between the two modes         Tag Type       0 dbm         Receptive Sensitivity       -85dbm         Static Current       <1µA		Card Format	
S4mm       -40°C-+85°C (industrial level)         Warking Temperature       -40°C-+85°C (industrial level)         Ware Frequency Area       2400-2480GHz         Card Reading Distance       -20Cm         Protective Level       IP65         Weight       250g         Dimension       108 x108 x 28mm         Radio frequency card       Model         Working Frequency       2.400-2.480GHz         Recognising Distance       A maximum of 120m         Distance Control       can switch between the two modes         Tag Type       read only, can work with ID or IC card         Emissive Frequency       0 dbm         Receptive Sensitivity       -85dbm         Static Current       <1µA		Format Setting	export format through card programming
<ul> <li>Card Reading Distance</li> <li>Protective Level</li> <li>IP65</li> <li>Weight</li> <li>250g</li> <li>Dimension</li> <li>108 x108 x 28mm</li> <li>Recognising Distance</li> <li>A maximum of 120m</li> <li>Distance Control</li> <li>Card Reading Distance</li> <li>Tag Type</li> <li>Recognising Distance</li> <li>Tag Type</li> <li>Receptive Sensitivity</li> <li>Recognisitive Frequency</li> <li>Odbm</li> <li>Receptive Sensitivity</li> <li>Static Current</li> <li>Static Current</li> <li>Average Current</li> <li>Average Current</li> <li>Functioning Duration</li> <li>Staticy</li> <li>Recognising Distance</li> <li>Staticy</li> <li>Recognising Distance</li> <li>Card Amaximum of 120m</li> <li>Card Amaximum of 120m</li> <li>Card Type</li> <li>Card Amaximum of 120m</li> <li>Card Type</li> <li>Card Current</li> <li>Static Current</li> <li>Static Current</li> <li>Static Current</li> <li>Staticy</li> <li>Recognise Duration</li> <li>Staticy</li> <li>Card Recognise Duration</li> <li>Staticy</li> <li>Card Amaximum of 120m</li> <li>Staticy</li> <li>Chard Type</li> <li>Concrete surface (1m/3 times)</li> </ul>		Working Temperature	-40°C- +85°C (industrial level)
Protective Level Protective Level Protective Level Protective Level Weight Storm Dimension 108 x108 x28mm 108 x108 x28mm Radio frequency card Model Recognising Distance Recognising Distance Recognising Distance Tag Type Gan switch between the two modes Tag Type Receptive Sensitivity Storm Storm Store Frequency Odbm Store Current		Wave Frequency Area	2400-2480GHz
Weight250gRadio frequency cardModelRFC-3455-WVorking Frequency2.400-2.480GHzRecognising DistanceA maximum of 120mDistance Controlcan switch between the two modesTag Typeread only, can work with ID or IC cardReceptive Sensitivity-85dbmStatic Current<1µA		Card Reading Distance	<20cm
Nodel       RFC-3455-W         Working Frequency       2.400-2.480GHz         Recognising Distance       A maximum of 120m         Distance Control       can switch between the two modes         Distance Control       can switch between the two modes         Tag Type       0 dbm         Receptive Sensitivity       -85dbm         Static Current       <1µA		Protective Level	IP65
Radio frequency card       Model       RFC-3455-W         Working Frequency       2.400-2.480 GHz         Recognising Distance       A maximum of 120m         Distance Control       can switch between the two modes         Tag Type       read only, can work with ID or IC card         Emissive Frequency       0 dbm         Static Current       <1µA		Weight	250g
Static requery, state       Working Frequency       2.400-2.480GHz         Recognising Distance       A maximum of 120m         Distance Control       can switch between the two modes         Tag Type       read only, can work with ID or IC card         Emissive Frequency       0 dbm         Receptive Sensitivity       -85dbm         Static Current       <1µA		Dimension	108 x108 x 28mm
54mm55mm54mm55mm54mm55mm10Can switch between the two modes17Tag Type18Receptive Frequency0Odbm18Receptive Sensitivity19-85dbm10Static Current10Static Current10Average Current1014JA10145 years10Working Temperature10-40°c-+85°c (industrial level)10Free Fall10Concrete surface (1m/3 times)	Radio frequency card	Model	RFC-3455-W
54mm       55mm         54mm       55mm         1 ag Type       read only, can work with ID or IC card         Emissive Frequency       0 dbm         Receptive Sensitivity       -85dbm         Static Current       <1μA		Working Frequency	2.400-2.480GHz
54mm55mm54mm55mm54mm55mm54mm60 dbm6missive Frequency0 dbm6Receptive Sensitivity-85dbm6Static Current<1μA		Recognising Distance	A maximum of 120m
54mm5.5mmEmissive Frequency0 dbmReceptive Sensitivity-85dbmStatic Current<1μA		Distance Control	can switch between the two modes
Emissive Frequency0 dbmReceptive Sensitivity-85dbmStatic Current<1μA	E farm	Тад Туре	read only, can work with ID or IC card
Image: Static Current       < 1μA	86mm	Emissive Frequency	0 dbm
Average Current<7μABatteryCR2032x 2 (changeable)Functioning Duration4-5 yearsWorking Temperature-40°C- +85°C (industrial level)Free FallConcrete surface (1m/3 times)		Receptive Sensitivity	-85dbm
BatteryCR2032x 2 (changeable)Functioning Duration4-5 yearsWorking Temperature-40°C- +85°C (industrial level)Free FallConcrete surface (1m/3 times)		Static Current	< 1µA
Functioning Duration4-5 yearsWorking Temperature-40°C- +85°C (industrial level)Free FallConcrete surface (1m/3 times)		Average Current	<7µA
Working Temperature-40°C- +85°C (industrial level)Free FallConcrete surface (1m/3 times)		Battery	CR2032x 2 (changeable)
Free Fall Concrete surface (1m/3 times)		Functioning Duration	4-5 years
		Working Temperature	-40°C- +85°C (industrial level)
		Free Fall	Concrete surface (1m/3 times)
Weight 25g		Weight	25g
Dimension 86 x 54x 5.5mm		Dimension	86 x 54x 5.5mm

Product Specification		
Radio frequency card	Model	RFC3425-W
	Working Frequency	2.400-2.480GHz
	Recognising Distance	A maximum of 120m
	Distance Control	can switch between the two modes
. 54mm 3.5mm	Тад Туре	read only, can work with ID or IC card
	Emissive Frequency	0 dbm
8	Receptive Sensitivity	-85dbm
	Static Current	< 1µA
00 168891	Average Current	< 7µA
	Battery	Ultra-thin Lithium Battery
	Functioning Duration	5-6 years
	Working Temperature	-40°C- +85°C (industrial level)
	Free Fall	Concrete surface (1m/3 times)
	Weight	24g
	Dimension	86 x 54x 3.5mm
Radio frequency card	Model	RFC3427-B
	Working Frequency	2.400-2.480GHz
	Recognising Distance	A maximum of 120m
	Distance Control	can switch between the two modes
ı 27mm ı 8mm	Тад Туре	read only, can work with ID or IC card
54mm	Emissive Frequency	0 dbm
	Receptive Sensitivity	-85dbm
	Static Current	< 1µA
	Average Current	< 7µA
	Battery	CR2032 X1 (changeable)
	Functioning Duration	2-3 years
	Working Temperature	-40°C- +85°C (industrial level)
	Free Fall	Concrete surface (1m/3 times)
	Weight	10g
	Dimension	54 x 27 x 8mm

\*All specifications may change without prior notification.