



CF-RU5112P/ PT

Cititoare de distanta mare pentru cartele UHF pasive

Continut



Descriere

Aceste cititoare UHF de distanta mare pot citi/ scrie cartele UHF GEN2 cu cipuri Alien, U-Code, IMPINJ si altele. Se utilizeaza cu precadere in sistemele de control acces auto datorita distantei mari de citire (12m) si directionalitatii antenei insa pot fi utilizate si in aplicatii speciale ce necesita citirea rapida si precisa a unui numar mare de cartele simultan: logistica, competitii sportive, securitate pe santiere - evitarea accidentelor datorita unghiurilor de vizibilitate moarte, productie industrială, etc.

Caracteristici

- Suporta cartele/ tag-uri cu protocol ISO18000-6B, ISO18000-6C (EPC C1G2)
- Banda de frecventa 865.6-867.6MHz (consultati lista cu benzile disponibile pentru fiecare tara in parte, **ANEXA 1**)
- Frecventa fixa sau saritoare (FHSS)
- Putere de emisie pana la 23dBm (ajustabila - consultati **ANEXA2**)
- Suporta functionare automata, interactiva sau declasanta
- Suporta interfata de comunicatie Wiegand 26/34, RS232/ RS485, TCP/IP (**CF-RU5112PT**)
- LED stare / citire frontala
- Iesire de releu (2 releu NO/ NC)

Specificatii

GENERAL	
Tensiunea de alimentare:	9Vcc (-10%/+25%)
Consum:	3~7.8W (350~650mA)
Suport:	Prindere pilon, inclus
Distanta citire:	< 12m
Cartele suportate:	ISO18000-6B, ISO18000-6C (EPC C1G2) pasive (866MHz), IDC-1001UHF-GEN2
Comunicatie:	RS232, RS485, Wiegand, TCP/IP (CF-RU5112PT)
Frecventa:	Fixa / Saritoare (FHSS)
Banda frecventa:	865-868MHz, 902-927MHz (ajustabila - consultati ANEXA 1)
Putere emisie / antena:	23dBm / 12dBi (putere ajustabila - consultati ANEXA 2)
Rezistenta la intemperii:	IP65
Software:	Software programare, SDK, documentatie
Dimensiuni:	445(L) x 445(H) x 55(A) mm
Material / Masa bruta:	ABS+Aluminiu / 2.5kg
Conditii de depozitare:	-20°C ~ +75°C / 0-95% UR (fara condensare)
Conditii de operare:	-10°C ~ +55°C / 0-95% UR (fara condensare)
Certificate:	CE, FCC

* Distanta de citire depinde de antena, tipul cartelei, mediul de instalare si reglementarile de putere admise

Conexiuni electrice

Rosu	Alimentare +9Vcc	Iesire Releu 1	
Negru	GND	Roz	NO1
Albastru deschis	Wiegand DATA 0	Maro	COM1
Albastru Wiegand	DATA 1	Alb	NC1
Mov	RS485 R+	Iesire Releu 2	
Portocaliu	PS485 R-	Portocaliu	NO2
Maro RS232	GND / Wiegand GND	Gri	COM2
Alb	RS232 RXD	Mov	NC2
Roz	RS232 TXD		
Gri	Intrare declasare (trigger input) TTL level		

ATENTIE!

Inainte de utilizare configurati frecventa de lucru si puterea de emisie conform cu reglementarile statului in care se face instalarea. Consultati ANEXA 1 pentru detaliile specifice fiecarei tari.

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A.: Haiducului 3A, Cluj-Napoca
T.: +40 264 484 989
W.: www.yli.ro

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Programarea cititoarelor UHF de mare distanta

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Introducere

Cartelele UHF contin 4 sectoare ce pot fi citite/ scrise, parolate, etc. Pentru utilizarea acestor cititoare in sistemele de control acces cu interfețe de intrare Wiegand, se recomanda utilizarea sectorului TID al cardului pasiv UHF pentru identificarea utilizatorilor. Acest sector insumeaza un total de 192 biti din care doar 64 de biti sunt unici si reprezinta ID-ul cardului. Deoarece majoritatea sistemelor de control acces suporta interfeța de intrare Wiegand 34 (32+2 biti) se utilizeaza 32 de biti din acest cod incepand de la byte-ul 8. (bit 64-95). Mai jos aveti o reprezentare a memoriei unui card UHF.

Harta memoriei

Bank	Adresa	Descriere
User	00h - 1Fh	Sector definit de utilizator (alterabil)
TID	60h - BFh	Configurare Device
	20h - 5Fh	ID cartela, unic (nealterabil)
	00h - 1Fh	TID EPC/TMD/TMDID/TMN
EPC	20h - 7Fh	EPC # (Electronic Product Code - alterabil)
	10h - 1Fh	EPC-PC
	00h - 0Fh	EPC-CRC
Rezervat	20h - 3Fh	Rezervat - Acces parola, EPC optional
	00h - 1Fh	Rezervat - Distrugere parola

Setare parametrilor

Setarea parametrilor de functionare a cititoarelor UHF se realizeaza prin intermediul software-ului utilizand o conexiune seriala RS232 sau TCP/IP (CF-RU5112PT) cu cititorul. Mai jos gasiti descrierea catorva din parametri ajustabili:

Adress (HEX) - adresa cititorului (RS485);

Power - puterea de emisie, ajusteaza distanta de citire;

FreqBand - banda de frecventa utilizata (modifica gama de frezvente disponibila la Dmin/maxfre) - **vezi ANEXA 1**;

Dminxfre/Dmaxfre - interval frecvente functionare (diferit pe fiecare cititor daca sunt mai multe cititorare in apropiere);

Single Freq - fixeaza echipamentul pe o singura frecventa (**RECOMANDAT**);

Wiegand 26/34 - mod iesire interfeța Wiegand;

Work mode - Active mode (citire automata);

Single Tag Filtering Time - intervalul dintre doua citiri consecutive ale aceluiasi card;

First byte address - adresa primului byte din cod (**08**).

ATENȚIE: La conectarea cititorului la sistemul de control acces prin interfeța Wiegand, este necesara si conectarea firului GND.

The screenshot shows the 'UHFReader18 Demo Software v2.6' interface. It has several tabs: 'Reader Parameter', 'EPCC1-G2 Test', '18000-6B Test', 'Frequency Analysis', and 'TCPIP Config'. The 'Reader Parameter' tab is active. The interface is divided into several sections:

- Communication:** Includes 'Com' and 'TCPIP' options. Under 'Com', 'COM Port' is set to 'AUTC' and 'Reader Address' is 'FF'. A red box labeled '1' highlights the 'Open Com Port' button.
- Reader Information:** Shows 'Type: UHFReader18', 'Version: 03.88', 'Protcol: ISO18000-6B', 'Address: 00', 'Power: 23', 'Max InventoryScanTime: 10*100ms', 'Dminxfre: 865.7MHz', and 'Dmaxfre: 865.7MHz'. A red box labeled '2' highlights the 'Get Reader Info' button.
- Set Reader Parameter:** Includes 'Address(HEX): 00', 'Baud: 57600bps', 'Power: 23', 'Max InventoryScanTime: 10*100ms', 'Dminxfre: 865.7 MHz', and 'Dmaxfre: 865.7 MHz'. A red box labeled '3' highlights the 'Single Freq' checkbox. A red box labeled '4' highlights the '865.7 MHz' dropdown. A red box labeled '5' highlights the '23' dropdown. A red box labeled '6' highlights the 'Set Parameter' button. A red box labeled '7' highlights the 'EU band' radio button under 'FreqBand'.
- Set Work Mode Parameter:** Includes 'Wiegand Parameter' with 'Wiegand26' and 'Wiegand34' options. A red box labeled '8' highlights the 'Wiegand output MSB first' checkbox. A red box labeled '9' highlights the 'Data output interval: 30*10ms' dropdown. A red box labeled '10' highlights the 'SetWGParameter' button.
- Set Work Mode:** Includes 'Storage area or inquiry conducted Tags' with 'EPCC1-G2', 'ISO18000-6B', 'Password', 'EPC', 'TID', 'User', 'Multi-Query', 'One-Query', and 'EAS' options. A red box labeled '11' highlights the 'Active mode' dropdown. A red box labeled '12' highlights the 'EPCC1-G2' radio button. A red box labeled '13' highlights the 'Wiegand Output' radio button. A red box labeled '14' highlights the 'TID' radio button. A red box labeled '15' highlights the 'Byte Addr' radio button. A red box labeled '16' highlights the 'Activate buzzer' checkbox. A red box labeled '17' highlights the 'First Byte Addr(Hex): 08' dropdown. A red box labeled '18' highlights the 'Set' button next to it.
- Relay:** Includes 'Relay 1' and 'Relay 2' with 'Releas' buttons and a 'Set' button.
- TCPIP:** Includes 'Port: 6000', 'IP: 192.168.1.192', and 'Reader addr: FF'. Buttons for 'Open Net' and 'Close Net' are present.
- Other parameters:** 'EAS Accuracy: 8', 'OffsetTime: 5*1ms', 'Tigger time: 0', and 'Work Mode parameter' buttons.

At the bottom, a status bar shows '13:39:41 | *Set Parameter|± : successfully' and 'COM4'.



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ANEXA 1 - Starea de reglementare pentru utilizarea RFID în GEN2 EPC (860-960 MHz), bandă a spectrului UHF

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TARA	Status	Frecventa in MHz	Putere	Tehnica	Comentarii	Autoritate reglementatoare
Austria	OK	865.6 - 687.6	2 W ERP	ETSI		Communication Authority Austria +43 1 58058-0 rtr@rtr.at www.rtr.at
Belgium	OK	865.6 - 867.6	2 W ERP	ETSI		Institut belge des services postaux et des télécommunications - IBPT +32 2 226 8888 info@bipt.be eric.van.heesvelde@bipt.be www.bipt.be
Bulgaria	OK	865.6 - 867.6	2 W ERP	ETSI		Communications Regulation Commission (CRC) +359 2 949 2418 chairman@crc.bg www.crc.bg
Croatia	OK	865.6 - 867.6	2 W ERP	ETSI		Croatian Telecommunications Agency +385 1 489 6000 info@telekom.hr www.telekom.hr
Cyprus	OK	865.6 - 867.6	2 W ERP	ETSI		Office of the Commissioner of Telecommunications and Postal Regulation +357 2269 3000 info@octpr.org.cy www.octpr.org.cy
Czech Republic	OK	865.6 - 867.6	2 W ERP	ETSI		Czech Telecommunication Office +420 224 004 704 info@ctu.cz www.ctu.cz
Denmark	OK	865.6 - 867.6	2 W ERP	ETSI		Danish Business Authority +45 35 29 10 00 erst@erst.dk http://www.erhvervsstyrelsen.dk/tele/0/3
		915 - 921	4 W ERP			
Estonia	OK	865.6 - 867.6	2 W ERP	ETSI		Estonian National Communications Board (ENCB) +372 693 1154 postbox@sa.ee www.sa.ee
		915 - 921	4 W ERP			
Finland	OK	865.6 - 867.6	2 W ERP	ETSI		Finnish Communications Regulatory Authority (FICORA) +358 9 6966 1 info@ficora.fi www.ficora.fi
France	OK	865.6 - 867.6	2 W ERP	ETSI		Autorité de Régulation des Communications électroniques et des Postes (ARCEP) +33 1 4047 7010 courrier@arcep.fr www.arcep.fr
Germany	OK	865.6 - 867.6	2 W ERP	ETSI		Federal Network Agency for Electricity, Gas, Telecommunication, Post and Railway +49 6131 18 0 poststelle@bnetza.de www.bundesnetzagentur.de
Greece	OK	865.6 - 867.6	2 W ERP	ETSI		National Telecommunications and Posts Commission (EETT) +30 210 615 1000 info@eett.gr www.eett.gr
Hungary	OK	865.6 - 867.6	2 W ERP	ETSI		National Communications Authority, Hungary (NCAH) +36 1 457 7488 gulyas.robert@nhh.hu www.nhh.hu
		915 - 921	4 W ERP			

* NEUTILIZAREA FRECVENTEI SI PUTERII DE EMISIE ADMISE SPECIFICE TARII IN CARE SE UTILIZEAZA ECHIPAMENTUL ATRAGE SANCTIUNI DIN PARTEA STATULUI RESPECTIV.



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TARA	Status	Frecventa in MHz	Putere	Tehnica	Comentarii	Autoritate reglementatoare
Iceland	OK	865.6 - 867.6	2 W ERP	ETSI		Post and Telecom Administration +354 510 1500 pta@pta.is www.pta.is
Ireland	OK	865.6 - 867.6	2 W ERP	ETSI		Commission for Communications Regulation +353 1 804 9619
		915 - 921	4 W ERP			
Italy	OK	865.6 - 867.6	2 W ERP	ETSI		Autorità per le Garanzie nelle Comunicazioni (AGCOM) +39 081 7507111 info@agcom.it www.agcom.it
Latvia	OK	865.6 - 867.6	2 W ERP	LBT		Public Utilities Regulatory Commission +371 709 7200 sprk@sprk.gov.lv www.sprk.gov.lv
Liechtenstein	OK	865.6 - 867.6	2 W ERP	ETSI	918-921 MHz rezervat pentru protectie ER-GSM	Office for Communications www.ak.llv.li
		915 - 918	4 W ERP	ETSI limitat		
Lithuania	OK	865.6 - 867.6	2 W ERP	ETSI	Necesita licenta individuala	Communications Regulatory Authority +370 5 210 5684 rrt@rrt.lt www.rrt.lt
Luxembourg	OK	865.6 - 867.6	2 W ERP	ETSI		Institut Luxembourgeois de Régulation (ILR) +352 4588 4529 ilr@ilr.lu www.ilr.lu
		915 - 921	4 W ERP			
Moldova	OK	865.6 - 867.6	2 W ERP	ETSI		National Regulatory Agency in Telecommunications and Informatics +373 22 251317
		915 - 921	4 W ERP			
Netherlands	OK	865.6 - 867.6	2 W ERP	ETSI		Radio Communications Agency Netherlands +31(0)50-5877400 agentschaptelecom@at-ez.nl www.agentschap-telecom.nl
Norway	OK	865.6 - 867.6	2 W ERP	ETSI		Norwegian Post and Telecommunications Authority (NPTA) +47 22 824600 willy.jensen@npt.no www.npt.no
		915 - 921	4 W ERP			
Poland	OK	865.6 - 867.6	2 W ERP	ETSI		Office of Electronic Communications +48 22 534 9156 uke@uke.gov.pl www.uke.gov.pl
Portugal	OK	865.6 - 867.6	2 W ERP	ETSI		ICP - Autoridade Nacional de Comunicações (ANACOM) +351 21 721 1000 mailto:miguel.capela@anacom.pt www.anacom.pt
Romania	OK	865.6 - 867.6	2 W ERP	ETSI	RO-IR 11-05 RO-IR 11-06	National Regulatory Authority for Communications (ANRC) +40 21 3075 400 anrcti@anrcti.ro www.anrcti.ro
		867,6 - 868	500mW ERP			
Serbia	OK	865.6 - 867.6	2 W ERP	ETSI		Federal Ministry of Transport and Telecommunications +381 11 3114855 mintel@gov.yu



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TARA	Status	Frecventa in MHz	Putere	Tehnica	Comentarii	Autoritate reglementatoare
Slovak Republic	OK	865.6 - 867.6	2 W ERP	ETSI		Telecommunications Office of the Slovak Republic +421 2 5788 1553 secretary@teleoff.gov.sk frequency@teleoff.gov.sk
Slovenia	OK	865.6 - 867.6	2 W ERP	ETSI		Post and Electronic Communications Agenca of the Republic of Slovenia +386 1 583 6300 info.box@apek.si www.apek.si
		915 - 921	4 W ERP			
Spain	OK	865.6 - 867.6	2 W ERP	ETSI		Secretaría de Estado de Telecomunicaciones y para la Sociedad de la Información Juan Cañas +34 91 346 15 35 jcanas@minetur.es
Sweden	OK	865.6 - 867.6	2 W ERP	ETSI	Scutit de norme de licență 2006/804/EG	Post- och telestyrelsen (PTS) +46 8 678 55 00 pts@pts.se www.pts.se
Switzerland	OK	865.6 - 867.6	2 W ERP	ETSI	918-921 MHz rezervat pentru protectie ER-GSM	Office fédéral de la communication (OFCOM) +41 32 327 5511 ir@bakom.admin.ch www.bakom.ch
		915 - 918	4 W ERP	ETSI limitat		
United Kingdom	OK	865.6 - 867.6	2 W ERP	ETSI		Office of Communications - Ofcom +44 20 7981 3000 contact@ofcom.org.uk www.ofcom.org.uk
		915 - 921	4 W ERP			

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ANEXA 2 - Relatia dintre puterea emisa si cea radiata

Putere (dBm)	Putere (W)	ERP (8dBi)	ERP (12dBi)	Putere (dBm)	Putere (W)	ERP (8dBi)	ERP (12dBi)
1	0.0013	0.0048	0.0122	16	0.0398	0.1531	0.3846
2	0.0016	0.0061	0.0153	17	0.0501	0.1928	0.4842
3	0.0020	0.0077	0.0193	18	0.0631	0.2427	0.6095
4	0.0025	0.0097	0.0243	19	0.0794	0.3055	0.7674
5	0.0032	0.0122	0.0305	20	0.1000	0.3846	0.9661
6	0.0040	0.0153	0.0385	21	0.1259	0.4842	1.2162
7	0.0050	0.0193	0.0484	22	0.1585	0.6095	1.5311
8	0.0063	0.0243	0.0610	23	0.1995	0.7674	1.9275
9	0.0079	0.0305	0.0767	24	0.2512	0.9661	2.4266
10	0.0100	0.0385	0.0966	25	0.3162	1.2162	3.0549
11	0.0126	0.0484	0.1216	26	0.3981	1.5311	3.8459
12	0.0158	0.0610	0.1531	27	0.5012	1.9275	4.8417
13	0.0200	0.0767	0.1928	28	0.6310	2.4266	6.0954
14	0.0251	0.0966	0.2427	29	0.7943	3.0549	7.6736
15	0.0316	0.1216	0.3055	30	1.0000	3.8459	9.6605

ANEXA 3 - Referinte

DIRECTIVA 2014/53/EU
ETSI EN 300 440
ETSI EN 302 208-1
DIRECTIVA 2006/804/CE
ERC/REC 70-03
RO-IR 11-05
RO-IR 11-06

dBm - decibel-miliwatt (decibeli relativ la un miliwatt)

dBi - decibel isotropic (castigul antenei fata de antena isotropica ipotetica)

ERP - putere radiata efectiva (rezultatul puterii furnizate antenei si castigul relativ al acesteia la dipol semiunda in directia castigului maxim)

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