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Description

IP7000

The iP-UHF readers are available in four basic versions:

- USA unlicensed: 4 W EIRP frequency-hopping in the 902 – 928MHz ISM band
- AUS unlicensed: 1 W EIRP frequency-hopping in the 902 – 928MHz ISM band
- European unlicensed: 500mW ERP fixed frequency in the 869.4 - 869.65MHz band
- South Africa (as proposed by SABS WG1 of TC74): 8 W EIRP fixed frequency at 915.3MHz
- Other: Custom frequency and power settings are available.

The standard output is RS232 with programmable baud rate and flow control. Optional outputs include RS485 (optionally optically isolated) and Ethernet. All received IDs are date-and time-stamped in the reader. Supply is either from 12VDC or 90 - 264VAC.



Key Features

- § Available for USA, European, AUS and RSA spectrum allocations
- § Long range (up to 20 m depending on TX power and tag type)
- § Robust anti-collision protocol (up to 240 tags read simultaneously)
- § High tag read rate – about 200 tags/sec in multi-read application
- § Standard output RS232; RS485, Ethernet, WLAN 802.11, Fibre optic, Wiegand outputs optional
- § Real time clock (RTC)
- § IP-65 enclosure and connectors
- § Software, hardware and diagnostics control
- § Built-in test and diagnostics
- § Front panel status LED

Specifications

Freq/Pwr (rff-rfp)	902-928-4.0 (USA)	869-0.5 (EUR)	915.3-8.0 (RSA)	902-928-1.0 (AUS)
Power supply (psu)	Mains input type: 90 - 264 VAC @ ~1.4A, 50/60 Hz Low voltage input type: 11.7 – 12.3VDC @ 2.5A max (typ 600mA for 500mW reader) (12V device is only reverse protected up to 20V max. Provision must be made for additional surge protection and regulated power if necessary)			
Transmitter power (rfp)	Unlicensed: 4W EIRP Licensed up to 30W EIRP	Unlicensed: 500mW ERP	8W EIRP	1W EIRP
Operating frequency (rff)	Unlicensed: Frequency hopping in 902-928 MHz ISM band	Unlicensed: Fixed frequency in 869.4-869.65 MHz band	Fixed frequency at 915.3 MHz	Unlicensed: Frequency hopping in 902-928 MHz ISM band
Antenna type	Internal 4 dBil circularly polarised			
Read range	Typical read ranges (depends on reader placement and tags used)			
	Unlicensed: 6-8+ m	Unlicensed: 1-3+ m	10+ m	Unlicensed: 3-5+ m
Communication	Binary or ASCII RS232 with programmable baud rate and flow control Optional: Isolated RS485/RS422, Ethernet, WLAN 802.11b and Fibre optical.			
Data storage	Standard: Internal circular FIFO spool buffer for 64 tags. This data is transmitted as a free running stream and needs to be captured externally by a PC or by a DIMI controller. Optional: Embedded controller for local lookup table and data manipulation (iP-DIMI-SA-4, 8 or 32)			
Electrical interface	12 Pin (P1) circular connector for DATA with 6m cable with 9p D type female connector at the other end 3 Pin (P2) circular connector for POWER with 6m cable with no connector at the other end			
Environmental	Operating temperature range: -10 to +60C, Storage temperature range: -20 to +85C Humidity: 5 to 95% non-condensing, IP rating: IP 65, UV protection: Yes			
Physical	Dimension: 305 (W) x 805 (L) x 60 (H) mm, (Height excludes mounting brackets) Weight: Approx. 6.5 Kg unpacked, 10Kg Packed for shipping.			
Mounting	Two pole-mounting brackets dia. < 60 mm diameter			
Approvals	EMC: CE approved EN 300 683, EN 300 220-1&3, EN 6100-3-2&3, FCC pre-compliance, (Full FCC compliance pending) Safety: CE approved IEC 60950, (Full UL safety compliance pending) Environmental: IEC 60068-2-1,2,5,28, IEC60529, IP65			

Ordering Information (see IP7001 for order codes & prices)

Part number: iP-X URDR-HP-rff-rfp-psu-R-Rx

rff: 869 = 869 MHz, 915.3 = 915.3 MHz, 902-928 = Frequency hopping in the 902 – 928 MHz band.

rfp: 0.5 = 0.5 WERP, 1.0 = 1.0 WEIRP, 4.0 = 4.0 WEIRP, 8.0 = 8.0 WEIRP

psu: 12V = 12V dc, MNS = 90-264Vac, 50-60 Hz

R: R = RS232 (Standard), E = Ethernet . (Other protocols are available on request)

Rx: RO = Read Only, RW = Read/Write (available Q1 2005)

Please consult your local dealer regarding the optional protocol/media converters and DIMI controllers