**REDBAT RFID** is a family of products designed by Techsigno suitable for use in industrial environments.

The **REDBAT UHF** Version is compatible with the ISO18000-6C standard are capable of working in the 865-867MHz (ETSI) and 902-928MHz (FCC) frequency ranges, and the **REDBAT HF** is compatible with ISO15693 standard as ISO14443A/B working at 13.56Mhz

They are available either with Integrated Antenna for Near Filed Applications or with External Antenna (on the UHF Version) for Mid Range.

The power input in the 9-36Vdc range and PROFIBUS - PROFINET - IoLink communication interfaces with M12 connectors and IP65 enclosure make them suitable for use in industrial environments.

Ease of use is then ensured by the SW suite supplied with the kit that allows the configuration of functional modes.

The complete messaging documentation and the DLLs provided allow for quick and easy integration with third party applications.

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| Physical Characteristics | |
|---|---|
| Dimensions | 63*95*34mm |
| Weight | 250gr |
| Power Supply | 9-36Vdc |
| Optical Indicator | Power On<br>Activity<br>RFID Status |

| Performance | |
|---|---|
| CPU | Cortex M4 |

| User Environment | |
|---|---|
| Operating Temp. | -40˚C to 60˚C |
| Storage Temp. | -40˚C to 70˚C |
| Humidity | 5%RH - 95%RH non condensing |
| Sealing | IP65 per IEC sealing specifications |
| ESD | ±15KV air discharge, ±6KV conductive discharge |

| RFID | |
|---|---|
| **UHF** | |
| Frequency | 865MHz-868MHz / 920MHz-925MHz / 902MHz-928MHz |
| Protocol | EPC C1 GEN2 / ISO18000-6C |
| Antenna | Internal 1dBi Circular Polarization<br>External on SMA Female connector |
| Power | 10dBm to 23dBm adjustable) |
| **HF** | |
| Frequency | 13.56MHz |
| Protocol | ISO14443A/B - ISO15693 |
| Chips | M1 card (S50/S70), M0 (Ultralight), M3 (Desfire D40/D41/D81), CPU_A card, CPU_B card, ICODE II, TI2048, LRI64K, Others for customizations |
| Range | 3-8cm |

(*) HF RFID is alternative to UHF - Read/write Range and Reading Rates depend on tags and environments

| Communication | |
|---|---|
| Serial | RS485 MODBUS<br>IOLINK |
| Ethernet | 10/100 TP |

| Connections | |
|---|---|
| Serial + Power | M12 5P Female Code A / Bypass M12 5P Male Code A |
| Ethernet | M12 4P Female Dcode |



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