



Key Features

- Compliant with USA, European, Australian, and RSA spectrum allocations.
- Robust anti-collision protocol (up to 120 tags simultaneously)
- Durable, ergonomically shaped case with carry handle, watertight when closed
- Real Time Clock
- Valid tag read and status indicators
- Battery charge level indicator
- Transmit level (tuning) indicator
- Connects to 2 transmit and receive antenna sets
- Transmit antenna auto-tuning, making the STK Lite Reader robust and effective in most environments
- Internal battery pack (3.5 hours minimum, continuous)
- Range 0.6 - 1.5m depending on tag
- DSP enhanced receivers
- Data & control: RS232 for diagnostics; Ethernet data output
- Ethernet status and activity indicator
- Synchronisation push-button for digital marker insertion into data stream

IP-X DF Long Range Sport Time-Keeping Reader - Lite

IPICO's Dual Frequency products offer the same ability as low frequency RF systems for operating tags in lossy mediums, and the same high data rates as those offered by UHF systems. The Dual Frequency operating frequencies are such that tags are not affected by human bodies and high moisture content substances, making DF ideal for Sport Time-Keeping purposes, where antenna mats may be wet and muddy. Compared with other low frequency technologies, much longer reading ranges can be achieved, mainly because the return link (Tag to Reader) operates at 6.8MHz, which is much higher than the forward link (for powering the Tag), operating at 125 kHz. These products employ a robust anti-collision algorithm, allowing up to 120 tags to be read simultaneously, at a rate of up to 30 tags/sec. DF Readers use separate transmit and receive antenna loops, and STK antennas are usually supplied as mats containing both. The DF STK Lite reader can connect to two such antenna mats, giving a 4 m wide track coverage. Tag IDs are transmitted serially by Ethernet to a PC.

| Item | Specification |
|-------------------------|---|
| Power requirements | 12V DC, 4A max (if tuning "medium" or better) |
| Internal battery | 14 A-h, gives 3.5 to 4.5 hours of use (if tuning "medium" or better) |
| Antennae type | 1 x 2 m loops, 4 turns for TX, 1 turn for RX; 2 loops can be connected |
| Transmit power | 62 dBuA/m @ 10 m on axis of one antenna (this is within ETSI EN300-330 limit) |
| Operating frequencies | 125 kHz transmit; 6.8 MHz receive tag signal |
| Real Time Clock | Time set by PC application and RS232 connection to reader |
| Communications | RS232 for diagnostics & setup, Ethernet data output |
| Auto-tuning | Operates on switch-on; can be invoked manually by push-button on front panel |
| Controls | ON switch, Auto-tune push-button, Synch push-button (inserts digital marker into data stream) |
| Indicators | Tuning LED (Green-Yellow-Red) LED indicating "good" - "medium" - "bad" for each transmit output Battery voltage level LED (Green-Yellow-Red), indicating "high" - "medium" - "low" charge states Valid ID received & sent; Reader ready status LAN (Ethernet) activity |
| Data output Performance | Continuous flow of tag IDs as they are read, with time stamps Read range: 1.3 m using STK tag (57 x 46 x 1.8 mm laminated); 1.5 m using ISO size DF tag Max tag speed: 10 m/sec using STK tags |
| Physical | 440 x 220 x 340 mm box, Watertight, crushproof, and dust proof with Double Throw latches Weight: 10.0 kg without antennas |

| Order Information | Product Code | Description |
|----------------------------------|--------------|----------------------|
| DF Long Range STK Lite Reader RO | IP3458 | IP-X DFRDR-STK-LI-RO |