



Key Features

- Low cost single chip solution
- Compliant with USA, European, Australian and RSA spectrum allocations
- Dual frequency (Transmit 125 kHz / Receive 6.8 MHz)
- Long read range - 0.6 m (can be more depending on reader/tag configuration)
- Robust anti-collision protocol (up to 120 tags read simultaneously)
- Fast moving tags (10 m/sec) can reliably be read using the STK Elite or STK Lite readers
- Factory programmed 64 bit ID number
- High tag transmission rate (128 kbits/sec)
- High tag read rate – up to 155 tags/sec
- Passive – no battery
- -40 to +85 °C temperature range
- Two slits for ankle strap
- 35x20 mm area to place race number label
- Waterproof
- High gain antennae

Multi-sport Tag

The Multi-sport Tag integrates with the IPICO Sports timing platform to offer extreme flexibility in terms of tag positioning and outstanding read range combined with the protection of a robust, water-proof casing made to withstand the most demanding conditions in running, multisport and cycling events. The Multi-sport Tag is supplied with a soft elastic band for positioning on participant's ankle.

Multi-Read Performance (Tag numbers and Tag Speed)

Version	Data rate	Maximum Interval	Speed	Number of tags readable
V39	128 kbit/s	16 kbits	8 m/s)	8
			2 m/s)	36

Item	Specification
Power requirements	Passive-no batteries (inductive coupling at 125 kHz, which is received and rectified to generate a supply voltage for the chip)
Read range (STK Elite or STK Lite Reader)	0.6 m/min
Data rate	128 kbit/s
Moving tags, readability	10 tags @ 8 m/sec; 35 tags @ 2 m/sec
Multi-read rate	20 tags in beam: 90 tags/sec; 100 tags in beam, 55 tags/sec
Protocol saturation	Time to read 20 tags = 0.2 sec; time to read 100 tags = 1.8 sec
ID Length	64 bits (including 16 bit CRC)
Antenna	Air wound higher gain (125 kHz and 6.8 MHz coil)
Programmability	Read-only, factory programmed ID, 64 bits
Size and weight	1.75 in; 4.48 cm
Environmental	Operating temperature range: -30 to +70 C
	Storage temperature range: -40 to +85 C
	Waterproof
	IP rating: IP 68
	UV resistant: Yes
Housing material	Orange molded plastic
Ankle strap	Black elastic ankle strap loops through the tag slits

Order Information	Product Code	Description
X3 DF STK Multi-Sports Tag	IP3498	IP-X X3 V39