



## PRODUCT DATA SHEET

### T100 VEHICLE ID TRANSMITTER / RECEIVER



Track 100 is a compact vehicle identification system designed for the control of moving vehicles.

The transmitter is a vehicle battery powered device that is fitted to the undercarriage of the vehicle. The receiver is connected to a conventional inductive loop buried below the roadway surface.

Energy transfer from the transmitter is by inductive (transformer) action. The transmitter emits a low power signal that is received and verified by the receiver, which responds with a control output

The system allows for the positive identification of vehicles fitted with the identification device and the receiver ignores unequipped vehicles.

The output of the receiver is used to automatically open a control barrier, or gate or to implement priority traffic control.

#### FEATURES

**Reliability** - Track 100 has been tested to speeds to 140km/h, proving reliable operation at high and low speeds.

**All vehicles** - Track 100 is suitable for all sizes of vehicles from fork-lifts to heavy articulated vehicles with higher than usual road clearance. The receiver operates to a distance above the roadway of 2 metres.

**Rugged** - The Track transmitter is totally sealed and suitable for the harshest environments.

**Detector loop compatible** - The Track 100 Receiver uses a standard detection loop as an antenna and will function with most loops installed for loop detectors.

**Secure code** - The Track 100 Receiver responds to a unique modulated signal with no chance of false triggering by noise or other radio sources.

#### APPLICATIONS

- Traffic Priority applications  
Emergency vehicle priority at traffic intersections, tolls, rising bollards
- Selective Access control applications  
VIP Car park access or other selectively restricted areas
- Industrial Automation applications  
Fleet tracking  
Automation of loading processes  
Speed and travel time logging

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## TECHNICAL DATA - T100

### Functional Specification:

#### Transmitter

Carrier Frequency: 133 kHz Long term stability within 1% of factory preset

Modulation method: FM. Deviation  $\pm$  600 Hz

Coupling to Rx antenna: Inductive transformer action

Harmonic Content:

- 2<sup>nd</sup> = - 60dBc
- 3<sup>rd</sup> = - 48dBc
- 4<sup>th</sup> = - 86dBc
- 5<sup>th</sup> = - 57dBc
- >6<sup>th</sup> = <-60dBc

No. of Codes: 1 (one)  
Code 1 = 1847Hz

Reading height: 2 metres on Max sensitivity  
0.8 meters on Min sensitivity

Power: 11 to 40V DC @ 10mA max.

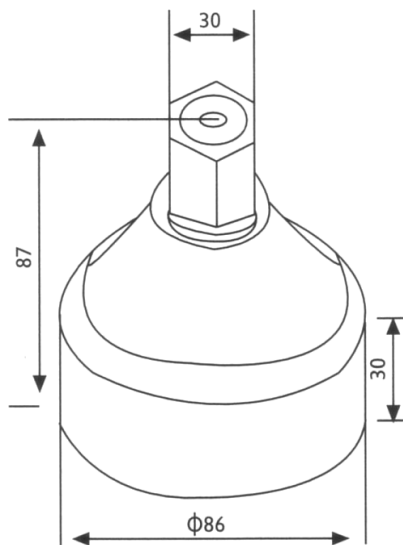
Mechanical Data: Transmitter is cone shaped  
Base diameter = 85 mm  
Height of cone = 87 mm

Mounting: Single bolt mounting 20mm

Material: Polypropylene - injection moulded

Cable: 2 core - 1.5 metres length

Operating temperature: -10°C to +70°C



TRACK 100 TRANSMITTER

#### Receiver

Front Panel indications: Green LED : Power on  
Red LED : "Detect" - transmitter detected  
Red LED : "Code" - Valid code detected

Front Panel controls: Sensitivity selector  
MIN - MED - MAX

Demodulation method: Phase locked loop demodulator

Transient protection: Input isolation transformer  
Diode clamping

Antenna: Standard Induction detector loop  
10  $\mu$ H to 1000 $\mu$ H  
(Does not "share" loop with a Vehicle detector)

Loop Feeder: Maximum 300 metres  
Twisted pair cable, 0.5mm square cross section, copper, multi strand

Output Relay: N/O Relay Contact pair  
6 A Rated at 230V AC

Output duration: Presence - output is maintained as long as transmitter is present.  
1 second turn-off delay to prevent spurious signals as transmitter traverses nulls

Power: 230 / 240 V AC Mains input  
2.5 VA max

Size of Housing: 113 mm (H) X 56mm (W) X 132mm (L) - excluding mating connectors

Mounting: Free standing shelf mount

Connector: 11 Pin loop detector format connector  
Mains - 3 Pin VDE plug

Operating temperature: -10°C to +70°C

### ORDERING INFORMATION

436FT0100	T100 Transmitter	11- 40v DC
436FT0102	Track 100 Receiver	240V AC
-	VDE Mains lead	supplied
-	11 Pin wiring harness (1.5 meters)	supplied