

# Tarvos Integrated RFID Reader

## Highlights

- Simple Installation
- Best-in-class Performance
- Multi-Protocol
- Integrated Reader
- External Antenna Port
- Ruggedized for Harsh Environments
- IP 67 tested and certified design
- Industrial Grade Design
- 26-Bit Wiegand & OSDP Output
- Arming Loop Control Support
- Direct Control Output Support
- PoE Powered
- Constellation Test Tool & Web Software



## Applications

Gated Communities  
Parking  
Private Business  
Loyalty (Car Dealerships, Casinos)  
Logistics  
Critical Infrastructure  
Airports  
College/University Transit/Bus

## Product Description

The **Tarvos** Integrated Reader takes UHF RFID performance for vehicle identification systems to a new level by providing best-in-class high-speed read accuracy and reliability. Tarvos is designed from the ground up for high-demand vehicle identification. Taking advantage of its tolling design roots, Tarvos provides unmatched performance for the Access Control & Parking Markets.

**Tarvos**, along with its siblings, Titan & Saturn, are the only Multi-Protocol Readers in the market for Access Control and Parking applications. As a result, Tarvos is capable of reading multiple protocols simultaneously, enabling seamless integration into current infrastructure and legacy transponder bases. These capabilities provide significant cost benefits. Tarvos supports: ISO-18000 63/6C, RAIN RFID/Gen2V2, ISO 18000 6B, 6B-80K, ISO 10374 (ATA), TDM (IAG), Title 21 and Artefato SJ5511 protocols.

**Tarvos** also supports adding an additional high-performance antenna via its standard external port, providing added flexibility to cover a second lane, and/or expanded read zone coverage.

**Tarvos** is designed for extreme outdoor weather conditions and is designed and certified to IP-67. Tarvos, like all of our reader offerings, is also fully FCC-compliant and certified.

## Antenna Specification

Frequency Range	865 - 928 MHz (Wideband design)
Gain	12 dBi
Return Loss	≤ 15 dB
Horizontal Beamwidth	45.5°
Vertical Beamwidth	43.5°
Polarization	Linear Horizontal
Impedance	50 Ω
Radome Material	ABS

## Specifications

### Physical

Dimensions	445 x 445 x 100mm (17.52 x 17.52 x 3.93")
Weight	3.97kg (8.75lbs)
Visual Indicator	LED (Power, Transmit, Receive, Status)

### RFID

Frequency	UHF 860-960 MHz
Protocols	ISO 18000 6C/63 RAIN RFID/Gen2v2 *ISO 18000-6B, 6B-40K, 6B-80K *ISO 10374 (ATA) *TDM (IAG/PS111) *Title 21 *Artefato SJ5511

\*Note: these protocols are optional and may be purchased.

Supported Regions	FCC ETSI Other available
Data Transfer Rate	up to 128 kbps (from reader to tag)
Read Rate	up to 1000 tags/second
Tag speed	up to 240km/h
Conducted Power	*+10 to +33 dBm
Power Consumption	24 Vdc, max 19.8W
Interference Rejection	Dense Interrogator Mode

### Connectivity

Communications	10/100 BaseT Ethernet, RS232
GPIO	2 Inputs, 2 Outputs
Power Supply	PoE+ or +12 to 57 VDC, 1.25A
Antenna Ports	1 Monostatic, N-Type Female

### Environment Requirement

Operating Temperature	-40°C to +70°C (Ambient) (-40°F to +158°F)
Storage Temperature	-40°C to +85°C (-40°F to +185°F)
Humidity	100% Condensing
IP Rating	IP67

### Hardware and Software

Memory	Persistent data storage for up to 1,000,000 unique transactions
Network Services	DHCP, HTTP, SNMP, Discovery

### Regulatory

Safety	UL 60950-01, UL 2043, IEC 60950-1, EN 60950-1
RF/EMI/EMC	FCC Part 15, RSS 210, EN 302 208, ICES-003 Class B, EN 301 489-1/3, FCC Part 90 and RoHS, WEEE
Case Material	Cast Aluminum