



Product Overview

*The Insight TR-301tm
Harsh-Environment Gen2 RFID Reader*



The *TR-301tm* is a state-of-the-art Gen2 RFID reader, power supply and antenna integrated into a weatherproof enclosure. Designed for outdoor use under harsh environmental conditions, the *TR-301tm* meets the IP-67 (ingress protection) standard. More than just rugged, the *TR-301tm* is an enterprise-ready network appliance.

Built using state-of-the-art electronics, with TCP/IP networking capabilities and advanced DSP algorithms for fast and reliable RFID read performance, the *TR-301tm* is the best choice for systems integrators.



Features

Small Size

- 12" x 12" x 3"
- 8.5 lbs

High Performance

Completely TCP/IP based with all the functionality that goes along with today's network appliance. Telnet, FTP, Direct File Transfer and Email options for file and system health information. All functions can be managed through the web browser, eliminating the need for special software or training.

Cost Effective

Saves the costs of cabling by integrating the RFID Antenna and reader into a single, robust package thereby lowering the cost of installation and maintenance.

Installer-Friendly

IP-67 enclosure and connectors. Pole mount kit, with azimuth and elevation control for easy installation.

Developer-Friendly

With a simple and powerful control protocol and well-documented APIs for Java, Ruby, and C# the *TR-301tm* is easy to integrate into your application.

Units can be configured to deliver data in a variety of formats, including text, XML and custom formats. The API supports device configuration, tag reading, as well as firmware upgrade for units in the field.

Applications

- Parking Garages
- High-Speed Toll Systems
- Race Timing
- Fleet / Yard Management
- Container Tracking
- Shipping / Receiving
- Perimeter Monitoring



Technical Specifications

Frequency	902~928MHz (Depends on regulatory region)
Physical	Width: 12 in Length: 12 in Height: 3 in Weight: 8.5 lbs
Environmental	Dust and Moisture: IP-67
Regulatory Compliance	FCC part 90 Compliant RoHS
RFID Protocols	ISO-18000-6C (EPC Gen2)
Read Rate	200 TPS in EPCg Dense Reader Mode
Read Range	Approx. 5 meters with 9 dBi circularly polarized antenna (integrated)
Antenna	Integrated, 9dBi circularly polarized antenna
RF Power Output	15-30 dBm adjustable in 0.1 dB steps
Host Connections	Ethernet LAN: TCP/IP, HTTP and DHCP support Web interface available for configuration.
Remote Management Protocols	HTTP, Telnet (Compatibility Mode for Alien Reader Protocol)
Power	Standard, NEMA 5-15 125 V Wall power
Power consumption	~10 Watts
Dense Reader management	Dense Reader Mode
Software SDK	C#, JAVA, RUBY

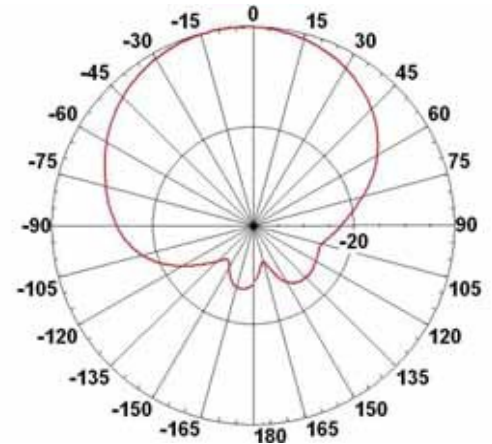


Illustration 1: Azimuth Radiation Pattern (915 MHz)

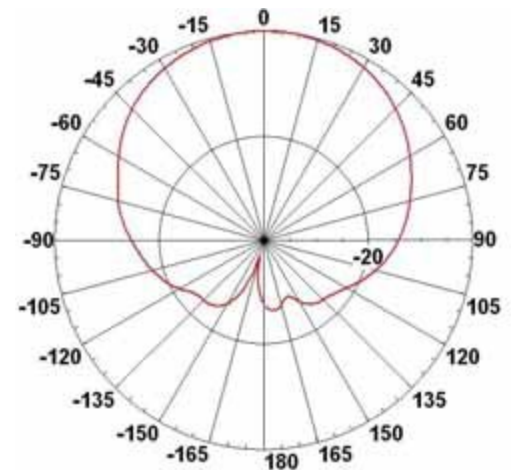


Illustration 2: Elevation Radiation Pattern (915MHz)

About Thinkify

Thinkify is a privately-held technology company in Morgan Hill, California that is enabling common objects, devices and whole environments to become aware of their contents using RFID.



Thinkify – Making things think.tm