

# **Product** Profile

- First RFID reader specifically created for mobile mount applications
- Supports multiple air interfaces including ISO, Gen 2 and Class 1
- Rugged cast aluminum alloy housing, sealed to IP65
- Designed for serial attachment to Intermec's CV60 vehicle mount computer



### IV7 INTELLITAG® VEHICLE MOUNT RFID READER

RFID has always delivered the twin conveniences of hands-free scanning with little or no human intervention. Now, Intermec has taken that to the next level by adding the convenience of mobility with the new IV7 Intellitag® Vehicle Mount RFID reader. The IV7 joins an award winning family of Intellitag readers that include several handheld and fixed mount form factors.

As Intermec's first packaged forklift-mounted RFID reader system, the IV7 is designed for serial attachment to the Intermec® CV60 vehicle mount computer. Both are built to withstand the rigors of harsh, industrial environments and are sealed to IP65 ratings. The CV60, acting as the local host for the IV7, provides network management and security. The built-in DC-DC converter handles the noisy input power environment.

RFID standards are continuing to evolve, which requires manufacturers and retailers to have multi-protocol reading capability if they are implementing RFID in an open supply chain. When fully equipped, the IV7 can read multiple air interface protocols, even in mixed populations of tags, including EPC UHF Generation 2 (Gen 2), ISO 18000 6-b and EPC Class 1.

While portal mounted readers are capable of capturing pallet data and some carton data, the tagged items must be brought to the reader. Enterprises often need the flexibility to read RFID tags in certain and

not-so-certain locations which may not be near the location of a fixed reader. The Intellitag IV7 not only delivers the flexibility of "read where you need," but also a cost advantage over portal reader systems wherever the number of dock doors is significantly larger than the number of fork trucks.

Commercial and U.S. government supply chains will find the IV7 ideal for pick and put away applications. The CV60 can command the IV7, equipped with a location tag-sensing antenna, to scan for RFID tags when a pallet is picked up. The IV7 captures not only the location of the pallet pick up, but also through what doorway it passed, the path the forklift traveled and where the pallet will be placed.

The wireless capability of the CV60 combined with the snappy reads of the IV7 mean that warehouse management systems are automatically updated with location status as the truck moves through tag-equipped zones, as well as with shelf location data when the pallet is dropped off or retrieved.

The IV7's cast aluminum housing has built-in cable strain relief features, and with predrilled holes in the base plate, is designed for either U-bolt or flexible strap attachment to many makes of fork trucks. The IV7 can be mounted in any position on the vehicle within 3.5 m (10 ft.) of the vehicle battery or power source such as a terminal strip. The communication to the CV60 is via R\$232 cable and connection.

#### PHYSICAL DESCRIPTION

The IV7 is a rugged RFID tag reader designed to be mounted on a vehicle for mobile use and operation in the same harsh environment as the CV60 vehicle mount computer.

## PHYSICAL CHARACTERISTICS OF THE READER

Length: 34.3 cm (13.5") Height: 9.5 cm (3.75") Width: 23.6 cm (9.3") Weight: 3.08 kg (6.8 lbs)

#### **STANDARD FEATURES**

#### **Antenna Connections**

4 connectors - Option-reverse SMA or SMA

Selectable by software

#### Multiple tag environments

Capable of operation in mixed tag populations – ISO 18000-6b, EPC UHF Gen 2, and EPC Class 1. Configurable for mixed or single tag-type operation. Air interface software on IV7 is downloadable to add Gen 2 and Class 1 air interfaces and to "future-proof" the product as standards evolve and new features become available.

#### POWER

**Supply:** Vehicle DC power 12 to 60V, 4.5 A maximum

#### **SOFTWARE**

Application software for IV7 will reside on the "host" vehicle-mount computer, such as Intermec's CV60. Application program interface (API), Basic Reader Interface (BRI), demonstration and example applications software are included in the RFID Resource Kit, available through Intermec's Developers' Library.

#### **OPTIONS**

#### **RFID Frequency Options**

915 MHz (US FCC), 865 MHz (ETSI 302-208), and 869 MHz (ETSI 300-220)

#### **Communications Interface**

RS232

#### **ACCESSORIES**

Vehicle-mount DC power cable kit Antennas, and antenna cables

#### **ENVIRONMENT**

#### **Operating Temperature:**

-25°C to 55°C (-13°F to 131°F)

#### **Storage Temperature:**

-30°C to 75°C (-22°F to 167°F)

#### **Humidity (non-condensing):**

10% to 90%

Shock and Vibration Protection: Withstands standard material handling vehicle environments. Meets or exceeds MIL STD 810F

**Environmental Rating: IP65** 

#### **SAFETY & REGULATORY APPROVALS**

ANS INCITS 256:1999 (R2001) - Parts 2, 3.1 8, 4.2

ANSI MH10.8.4 ISO/IEC CD18000 Part 4 ISO/IEC WD18000 Part 6

- US/C UL Listed
- TÜV/GS Licensed
- CB Report for EN 60950, addressing all national deviations
- FCC OET Bulletin 65, FCC Guidelines for Human Exposure to Radio Frequency Electromagnetic Fields
- CENELEC EN50364/EN50357, European RF Exposure standard
- AS/NZS 2772.1, Australia/New Zealand RF Exposure standard
- Mexico NOM 19

#### **RESTRICTIONS ON USE**

Some approvals and features may vary by country and may change without notice. Please check with your local Intermec sales office for further information.

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