



Zebra Enterprise Solutions

CONCEPT2
SOLUTION

Sapphire VISION Reader



DATASHEET

Ultra-Wideband Real-time Inventory and Personnel Access Control

Sapphire VISION, developed by Multispectral Solutions (MSSI), part of Zebra Enterprise Solutions (ZES), provides robust presence detection for inventory and personal access control. Utilizing Multispectral's patented short-pulse, Ultra-Wideband (UWB) technology, Sapphire offers a detection level that exceeds the capabilities of other Radio Frequency Identification (RFID) technologies. Sapphire VISION can be used either as a stand-alone solution or as the perfect complement to the Sapphire DART RealTime Locating System (RTL).

Sapphire VISION offers real-time inventorying that can be adjusted from inches to hundreds of feet with clear line of sight (LOS).

Embedded software on the Sapphire VISION reader allows for straightforward system configuration and display of real time tag presence. The reader can either stream live tag data or show cumulative tag reports via the easy to use, browser based, Graphical User Interface (GUI) utilizing a Java™ run-time environment. This data can be saved to client memory for viewing and also further integrated into RFID middleware solutions available from ZES and a variety of vendors.

Sapphire is the proven choice for exceptional inventorying of critical assets and personnel in demanding industrial, manufacturing, supply chain and badging applications.

Sapphire VISION Starter Solution

The following recommended Sapphire VISION reader starter solution includes the hardware and software necessary to fully assess the superior performance and capabilities of this unique RFID technology. This starter solution is fully extensible and allows customers to easily transition from pilot evaluation to full-scale deployments.

Recommended Sapphire VISION Starter Solution		
Quantity	Product	Part Number
1*	Sapphire VISION fixed reader with embedded software	V652-X
1*	Dual option ceiling mount	MA651-DO9
1*	Shielded Cat 5e cable (150')	C651-150
10*	Sapphire 1x1 Asset, 1 Hz Tags	T651-1x1-401
10	Sapphire 1x1 Asset, 5 Hz Tags	T651-1x1-405
10	Sapphire Mini Badge, 1 Hz Tags	T651-BDG-401
10	Sapphire Mini Badge, 5 Hz Tags	T651-BDG-405
10	Sapphire Micro Asset, 0.5 Hz Tags	T651-MIC-4005
10	Sapphire Micro Asset, 1 Hz Tags	T651-MIC-401

* Denotes minimum quantity for performance

SAPPHIRE VISION READER FEATURES

- Exceptional performance — Performs in high multi-path environments
- Long RFID Range — Up to 200 meters (650 feet)
- Unmatched RFID tag throughput — Up to 5000 tags/ second
- Adjustable receiver sensitivity — From 30 cm (1 foot) up to 200 meters (650 feet)
- Multiple information outputs — Raw data using TCP/IP or displayed via web browser

Sapphire VISION Reader Specifications*

Model V652-X

Performance	
Frequency Range (-10dB)	5.94 to 7.12 GHz
Antenna Gain	<ul style="list-style-type: none">• R651-O (Omni): 2.5 dBi• R651-MG (Mid-Gain): 8 dBi
Environmental/Physical	
Operating Temperature	10°C to 50°C (50°F to 122°F)
Length	16.5 cm (6.5 in)
Width	6.4 cm (2.5 in)
Height	6.4 cm (2.5 in)
Weight	0.43 kg (15 oz)
Power	5 – 12 VDC
Wired Communications Interface	
Network	Ethernet/ Cat 5e
Regulatory Approvals	
North America	<ul style="list-style-type: none">• FCC Part 15 Subpart B• UL60950-1/CSA60950-1

*Specifications subject to change without notice.

About Zebra Enterprise Solutions

Zebra Enterprise Solutions, a division of Zebra Technologies Corporation, extends Zebra's reach beyond passive RFID by employing state-of-the-art software and hardware solutions to locate, track, manage, and optimize high-value assets, equipment and people across the world's largest supply chains. Whether tracking containers through a port, optimizing parts for manufacturing, or managing ground support equipment at an airport, the real-time asset management solutions from the combination of Navis, WhereNet, proveo, and Multispectral Solutions provide improved visibility and velocity to gain measurable business improvements. Utilizing products that are based on ISO/IEC 24730-2, Cisco CCX Wi-Fi, precision GPS, and UWB technologies, Zebra Enterprise Solutions offers a wide range of location solutions that are "application matched," enabling its customers to put the right asset in the right place at the right time.

2

For more information, please visit us at www.concept2solution.com or email us at sales@concept2solution.com.

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