

RFID SOLUTIONS

Quickly Deploy RFID for Wireless Data Capture

The RFID Kit from Symbol Technologies provides a fully functioning advanced data capture system for quick deployment of pilots and small- to medium-sized data capture applications. This kit enables you to deploy a complete RFID system to demonstrate and quantify the benefits of RFID in your specific environment.

Designed for quick and easy implementation, the Symbol RFID kit includes an advanced, multi-protocol RFID reader, antennas, tags and more:

- 100 UHF RFID read-only tag inlays
- Reader network components:
 - AR400 advanced reader
 - Choice of high-performance area antennas or dual directional panel antenna array
 - Cables
 - Power supply
- System software and documentation

The Symbol RFID Kit delivers real-time visibility through unique identification of products and physical assets moving into and out of critical read zones. Ideal for small, focused deployments, this RFID kit enables you to effectively and affordably demonstrate integration with your current business processes while laying the groundwork for a cost-effective upgrade path.

Agile, Multi-Protocol Reader for High-Speed Read Rates

The Symbol AR400 advanced reader is an industrial-class, fixed reader that provides all of the RFID and control functions for superior, accurate data capture. A ready-to-connect intelligent network element transforms into an SNMP-managed networked hub that collects, writes, processes and communicates information from all EPC™-compliant classes of RFID tags. The AR400 has a rich feature set that includes tag filtering, reconciliation, user-defined association and selective visibility. The AR400 is easily adapted and configured to perform application-specific tasks.

A Comprehensive Suite of Application-Specific RFID Tag Inlays

Passive, EPC-compliant RFID tags are easily attached to containers, boxes, pallets, trays, totes and physical assets. These thin, flexible labels with RFID inlays contain a unique product identifier or EPC that enables you to track products and assets moving through your specific supply chain application. When materials with RFID tags pass through portal or dock doors, the AR400 reader captures the identification and immediately communicates the data back to a central database, providing real-time, dynamic data capture for significantly increased visibility.



Two Powerful Antennas to Create Superior Read Zones

The Symbol RFID kit gives you two antennas to choose from: High-Performance Area Antennas and Dual Directional Panel Antenna Arrays. High-Performance Area Antennas are general-purpose antennas for long range and large area RFID tag reading. Dual Directional Panel Antenna Arrays deliver maximum RFID performance in a compact, low-profile housing that is suitable for indoor and outdoor environments. Easy to deploy with the AR400, these antennas are ideal to create superior, application-specific read zones.

Symbol RFID Kit for Effective, Affordable Deployments

The RFID kit complements the portfolio of Symbol enterprise mobility solutions that enables organizations to capture, move and manage critical information to and from every point of business activity. Designed for small- and medium-sized deployments, this RFID kit offers a packaged solution for a faster, more streamlined implementation and increased access to real-time information.

For more information, contact us at +1.800.722.6234 or +1.631.738.2400, or visit us on the web at www.symbol.com/rfid.

Services for a More Successful Mobility Solution

Symbol offers a full suite of services, including complete analysis, design, installation, training and ongoing support for the seamless deployment, management and continued support of your RFID solution.

RFID Kit Specification Highlights

AR400 Reader

Physical Characteristics

Dimensions:	8.75 in. H x 11.75 in. W x 2 in. D (22.2 cm H x 29.8 cm W x 5.1 cm D)
Weight:	~6 pounds (2.7 Kg)
Base Material(s):	Aluminum, Silver, Die-cast
Visual Status Indicators:	LEDs for Power (Green), Activity (Yellow) and Error (Red)

Connectivity

Network:	RS422/485, RJ45 10/100 BaseT Ethernet, RJ45 RS-232 console (management), DB9 Control I/O Port (12) (user programmable), DB15
RF Connectors:	1.0/2.3 DIN Jack
Read Points (Channels):	4 (4 transmit and 4 receive) 2 or more can be combined into one logical read point
Power Supply:	+24VDC @ 1.2 amps

User Environment

Environmental Sealing:	IEC 529 IP54
Temperature:	IEC 60068-2-1/2/14 Operational: 0° to +55° C (+32° to +131° F) Storage: -20° to +70° C (-4° to +158° F)
Humidity:	IEC 60068-30/56 5-95% non-condensing
Vibration:	IEC 60068-2-6

Compliance

Safety:	EMI/RF Emissions
Regulatory:	Region 1, FCC Part 15

Operational Features

Frequency:	UHF band, 902-928 MHz
Method:	Frequency Hopping Spread Spectrum (FHSS)
Power Output:	Up to 30 dBm (only 1 Watt Part 15)
Air Link Protocol:	EPCglobal: Class 0, Class 1, Gen 2 Upgradable
Tag Buffering:	Local
Synchronization:	Network Time Protocol
IP Addressing:	Static and dynamic
Host Interface Protocols:	XML and Byte Stream
Regulatory:	Region 1, FCC Part 15

Network Management

Protocol:	SNMP
Configuration:	Via setup wizard
Event Management:	Auto reported events User-controlled thresholds, damping and filtering
Administrative Management:	Security/privilege controls, change traceability
Tag Management:	ID-based selection ability User-defined association to tag IDs Taglist management features for reconciliation and visibility

High-Performance Area Antenna

User Environment

Type:	Two circular polarized patch array
Dimensions:	28.3 in. L x 12.5 in. W x 1.5 in. D (71.7 cm L x 31.7 cm W x 3.8 cm D)
Weight:	~8 pounds (~3.6 Kg)
Casing:	Aluminum with PVC plastic cover

Dual Directional Panel Antenna Array

Physical Characteristics

Type:	Dual directional/dual polarization panel antenna array
Polarization:	Aperture 1: left hand circular Aperture 2: right hand circular
Nominal Impedance:	50 Ohms
Dimensions:	8.8 in. L x 8.1 in. W x 1.6 in. D (22.4 cm L x 20.6 cm W x 4.1 cm D)
Weight:	~1.2 pounds (0.54 kg)
Radome Material:	UL 94 V0 plastic
Temperature Range:	-40° to +80° C (-4° to +158° F)
Frontal Wind Loading at 125 mph Winds:	45 pounds (20.4 Kg)

Operational Features

Temperature:	IEC 60068-2-1/2/14 Operational: 0° to +55° C (+32° to +131° F) Storage: -20° to +70° C (-4° to +158° F)
Connectors:	2 type "N" female connectors
Voltage Standing Wave Ratio (VSWR):	1.25
Isolation -db:	-37
3db Beam Width:	60°
Gain in dbd/Linear:	6.75

Dual Dipole Read-Only Tags

Physical Characteristics

Dimensions:	4 in. x 4 in. (10.2 cm x 10.2 cm)
Read distance*:	Up to 25 ft. (7.6m)
Use:	Corrugated cardboard

*Note: The actual read or write range of any given tag/inlay will vary based upon its usage and the application environment that it is used in.

NOTICE: Repairs of this product may require the use of Symbol proprietary parts (and/or Symbol proprietary information). Symbol will sell these parts (and provide this proprietary information) only to end-user customers for self-service. It is Symbol's policy not to sell these parts to third-party service providers and not to allow a third-party service provider to act as an ordering or receiving agent for the parts necessary to repair this product. Applicable in the US. For all other countries, please contact your Symbol account manager or the local Symbol Customer Service representative in your area for further details.

About Symbol Technologies

Symbol Technologies, Inc., The Enterprise Mobility Company™, is a recognized worldwide leader in enterprise mobility, delivering products and solutions that capture, move and manage information in real time to and from the point of business activity. Symbol enterprise mobility solutions integrate advanced data capture products, radio frequency identification technology, mobile computing platforms, wireless infrastructure, mobility software and world-class services programs under the Symbol Enterprise Mobility Services brand. Symbol enterprise mobility products and solutions are proven to increase workforce productivity, reduce operating costs, drive operational efficiencies and realize competitive advantages for the world's leading companies. More information is available at www.symbol.com.



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RFIDKIT 02/05

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