



**A QUALIFIED RFID SOFTWARE SOLUTION  
MICROSOFT BIZTALK RFID  
MOTOROLA RD5000 PROVIDER  
Implementation Details**

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## **MICROSOFT BIZTALK RFID MOTOROLA RD5000 PROVIDER**

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The Academia RFID (Technical Expertise and Software Team) TESTeam® in Montreal have developed, tested and implemented a Microsoft BizTalk RFID Provider that allows for easy integration of the Motorola RD5000 Mobile Reader. Working with a group of software developers, system engineers and end-users in the Academia RFID Applications Development Lab, the TESTeam® set out to develop a provider component and mobile server component to interface between the forklift/pallet-jack mobile reader and BizTalk RFID, enabling RFID tag data transmissions. A second version supports inputs from the built in accelerometer and proximity sensor. Here are the implementation details in regards to the properties:

### **EXPOSED PROPERTIES**

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#### **GENERAL GROUP:**

Name, Location, Description, Vendor, Firmware Version

#### **RF GROUP:**

Air Protocols Supported, Air Protocols In Use, Frequency, Effective Range, Mode Continuous, Antenna Sequence, Power Level, Operation Environment

#### **SOURCE GROUP:**

Enabled, System Enabled, Source Type, Port Out put Value

#### **TAG READ GROUP:**

Duplicate Elimination Time

#### **COMMAND GROUP:**

Request Timeout 5000ms

#### **NOTIFICATION GROUP:**

Event Mode, Tag Data Selector

### **DEFAULT VALUES**

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#### **AIR PROTOCOLS SUPPORTED:**

EPC Class0\_PLUS, ECP Class1, EPC Class1\_GEN2

#### **FREQUENCY (MHz):**

915

#### **EFFECTIVE RANGE (METERS):**

6

#### **OPERATION ENVIRONMENT:**

Wireless

### **DEFAULT DEVICE PROFILE VALUES**

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General: Name = "RD5000"

General: Location = "Default"

General: Description = "RD5000 Provider"

General: Vendor = "Academia RFID"

General: Firmware Version = "1.0";

Tag Read: Duplicate Elimination Time (ms) = 2000

Command: Request Timeout (ms) = 5000  
Notification: Event Mode = true  
Notification: Tag Data Selected: Is Id = true, Is Data = false, Is Time = true, Is Type = true, Is Numbering System Identifier = true  
RF: Air Protocols Supported = Same as Default Values  
RF: Air Protocols In Use = Same as Default Value

## **DEFAULT ANTENNA PROFILE VALUES**

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General: Name = "Antenna1" or "Antenna2" (as per RD5000 standard names)  
General: Description = {  
    Antenna1 = "This is the build in antenna"  
    Antenna2 = "This is the external antenna"  
}  
RF: Air Protocols Supported: Same as Default Values  
RF: Air Protocols In Use: Same as Default Values  
RF: Frequency: Same as Default Values  
RF: Effective Range = Same as Default Values  
RF: Power Level = 100%  
  
Source: Source Type = Antenna  
Source: System Enabled = true  
Source: Enabled = true

## **INFORMATION TAKEN FROM THE DEVICE**

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### **Device:**

Device ID, Device Name, Firmware Version (Server Component)  
Can Get Tags (Read Tags), Can Notify Tags (Notifications)

### **Antenna:**

Air Protocols (in use), Antenna Name, Is Enabled, Is Present (System Enabled), Power

## **THE SERVER COMPONENT**

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### **BizTalk Commands Supported:**

Get Device Data, Get Tags

### **Notifications:**

Tag Event, Tag Added, Tag Removed

## **CONTACT US**

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For more information, please contact:

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