

MAGNUM  
RFID Reader ATEX Zone 1  
Stationary

PART ID:  
4500

The ATEX and IECEx™ Zone 1 certified multi-frequency reader, which supports both 125kHz ASK and 134kHz FDX-B ATEX certified transponders, enables customers to optimize their logistics and processes in harsh industrial environments. The stationary robust reader allows the use of 2 independently working ATEX and IECEx™ RFID antennas. The optimal tuning of the antennas with software commands makes the installation easy and saves time. In addition to the RS232/485 interface, the optionally available web server enables connection via Ethernet, so that integration into existing networks is easy. LF RFID Read Only Transponders EM4102/EM4200 (CF/64 or CF/32), FDX-B transponders are currently supported.

Main Specifications

|                       |                                                                                                                      |
|-----------------------|----------------------------------------------------------------------------------------------------------------------|
| Frequencies           | LF HF UHF                                                                                                            |
| Material              | Stainless Steel                                                                                                      |
| Operating Temperature | -20°C to 60°C                                                                                                        |
| IP Class              | IP54                                                                                                                 |
| Compliance            | RoHs & Reach, CE                                                                                                     |
| Key Features          | ATEX and IECEx™ Zone 1, Stainless Steel Housing, Serial or Ethernet Interface, Automatic Read Mode, Antenna Autotune |
| Options               | TCP/IP                                                                                                               |



Full Specifications

|                  |                                                                                                                                                                                                                                                                                                                                                                                                |
|------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Product ID       | 4500                                                                                                                                                                                                                                                                                                                                                                                           |
| Name             | MAGNUM                                                                                                                                                                                                                                                                                                                                                                                         |
| Atex             | yes                                                                                                                                                                                                                                                                                                                                                                                            |
| Material         | Stainless Steel                                                                                                                                                                                                                                                                                                                                                                                |
| Shape            | Long Range                                                                                                                                                                                                                                                                                                                                                                                     |
| Long Description | The ATEX and IECEx™ Zone 1 certified multi-frequency reader, which supports both 125kHz ASK and 134kHz FDX-B ATEX certified transponders, enables customers to optimize their logistics and processes in harsh industrial environments. The stationary robust reader allows the use of 2 independently working ATEX and IECEx™ RFID antennas. The optimal tuning of the antennas with software |

®TECTUS reserves the right to change any information or data in this document without prior notice. The distribution and the update of this document is not controlled. TECTUS declines all responsibility for the use of products with any other specifications but the ones mentioned above. Any additional requirement for a specific customer application has to be validated by the customer himself at his own responsibility. Where application information is given, it is only advisory and does not form part of the specification.

|                            |                                                                                                                                                                                                                                                                                                                                  |
|----------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                            | commands makes the installation easy and saves time. In addition to the RS232/485 interface, the optionally available web server enables connection via Ethernet, so that integration into existing networks is easy. LF RFID Read Only Transponders EM4102/EM4200 (CF/64 or CF/32), FDX-B transponders are currently supported. |
| Key Features               | ATEX and IECEx™ Zone 1, Stainless Steel Housing, Serial or Ethernet Interface, Automatic Read Mode, Antenna Autotune                                                                                                                                                                                                             |
| Options                    | TCP/IP                                                                                                                                                                                                                                                                                                                           |
| Article Type               | Stationary                                                                                                                                                                                                                                                                                                                       |
| Color                      | Grey/Yellow                                                                                                                                                                                                                                                                                                                      |
| Length [mm]                | 270                                                                                                                                                                                                                                                                                                                              |
| Width [mm]                 | 200                                                                                                                                                                                                                                                                                                                              |
| Thickness [mm]             | 169                                                                                                                                                                                                                                                                                                                              |
| Weight [g]                 | 17000                                                                                                                                                                                                                                                                                                                            |
| IP Class                   | IP54                                                                                                                                                                                                                                                                                                                             |
| PCB Material               | FR4                                                                                                                                                                                                                                                                                                                              |
| Chemical Resistance        | Not Specified                                                                                                                                                                                                                                                                                                                    |
| Flame Resistance           | Not Specified                                                                                                                                                                                                                                                                                                                    |
| Mechanical Resistance      | Not Specified                                                                                                                                                                                                                                                                                                                    |
| Compliance                 | RoHs & Reach, CE                                                                                                                                                                                                                                                                                                                 |
| Read / Read Write          | Read                                                                                                                                                                                                                                                                                                                             |
| Typical Reading Range      | 600mm                                                                                                                                                                                                                                                                                                                            |
| Supported Standards / Tags | EM4200, FDX-B                                                                                                                                                                                                                                                                                                                    |
| Operating Temp °C (min)    | -20                                                                                                                                                                                                                                                                                                                              |
| Operating Temp °C (max)    | 60                                                                                                                                                                                                                                                                                                                               |
| Storage Temp °C (min)      | -20                                                                                                                                                                                                                                                                                                                              |
| Storage Temp °C (max)      | 60                                                                                                                                                                                                                                                                                                                               |
| Power Supply               | 115...230V AC                                                                                                                                                                                                                                                                                                                    |
| Operating Frequency        | LF                                                                                                                                                                                                                                                                                                                               |
| Frequency Range            | 125 -134 kHz                                                                                                                                                                                                                                                                                                                     |
| Current Consumption        | 700mA                                                                                                                                                                                                                                                                                                                            |
| Interfaces Physical        | RS232/RS485/TCP-IP                                                                                                                                                                                                                                                                                                               |
| Interfaces Protocol        | ASCII                                                                                                                                                                                                                                                                                                                            |
| Transfer rate [Baud]       | 9600                                                                                                                                                                                                                                                                                                                             |
| Antenna Ports              | 2                                                                                                                                                                                                                                                                                                                                |
| Antenna ext.               | 2                                                                                                                                                                                                                                                                                                                                |
| GPIO                       | 5                                                                                                                                                                                                                                                                                                                                |
| Number of Input            | 2                                                                                                                                                                                                                                                                                                                                |
| Number of Output           | 3                                                                                                                                                                                                                                                                                                                                |
| Number of Relais           | 3                                                                                                                                                                                                                                                                                                                                |
| Connection                 | Terminal Clamps                                                                                                                                                                                                                                                                                                                  |
| Status [Display,LED]       | 4                                                                                                                                                                                                                                                                                                                                |
| Firmware Update User       | yes                                                                                                                                                                                                                                                                                                                              |
| Development Tools          | API/Demo                                                                                                                                                                                                                                                                                                                         |

## VARIANTS

| ID             | Variant      |
|----------------|--------------|
| 4500-01-000-00 | LF Read Only |

®TECTUS reserves the right to change any information or data in this document without prior notice. The distribution and the update of this document is not controlled. TECTUS declines all responsibility for the use of products with any other specifications but the ones mentioned above. Any additional requirement for a specific customer application has to be validated by the customer himself at his own responsibility. Where application information is given, it is only advisory and does not form part of the specification.