

The 216033 RFID reader is a high performance long range readers licensed according to ETSI, FCC, IC, SRRC (China) and Japan.

## **Key Features**

- ✓ High receiver sensitivity for enlarged and homogeneous tag detection range
- ✓ Powerful tag response decoding, e.g. for Dense Reader Mode
- ✓ 5 hardware interface ports: Ethernet, RS 232, RS485, USB and USB-Port
- ✓ Reader protection against fault conditions like antenna shortcut, antenna mismatching and electrostatic discharge
- ✓ RSSI data readout
- ✓ Applicable in rough, metal-containing industrial environments
- ✓ Robust aluminum housing
- ✓ High transponder population
- ✓ Very long antenna cable possible
- ✓ Optional and Additional 8-fold antenna multiplexer
- ✓ Web interface for configuration
- ✓ Sample function blocks for Siemens Simatic® and S7®
- ✓ PROFIBUS®, PROFINET® optional via gateway



## Technical Specifications

Transponder protocol :	EPC Class 1 Gen2 (ISO 18000-6c)
Antenna connection:	4 x SMA connector (50 Ohm); Reader internally multiplexed
Output power:	216033-C: 0.3 W ... 2 W (configurable) 216033-P: 0.3 W ... 4 W (configurable)
Frequency range:	860 MHz ... 960 MHz (depending on specific reader)
Interfaces:	Ethernet (TCP/IP) 10/100 Mbit/s; Full Spec. 802.3; RS 232 / RS 485; USB / USB-Port for WLAN dongle or external memory
Diagnosis (LED):	8 LEDs to visualize the device and antenna status
Inputs / Outputs:	5 Optocoupler (max. 24 V DC / 20 mA) Inputs 2 Optocoupler (24 V DC / 30 mA) Outputs 3 Relays (24 V DC / 1 A)
Bulk-Reading:	capability up to 150 transponders/s
Max. reading distance:	up to 52.4' or 16 meters, related to the transponder type and environmental conditions
Power supply:	24 V DC (±5 %) / Power over Ethernet (PoE)
Current Consumption:	max. 2A
Operating system:	Linux (Kernel 3.x.x), 64 MB RAM, 256 MB Flash
Material of housing:	Aluminium, powder coated
Dimensions:	(B x H x T) 10.2" x 46.02" x 2.75" (260 x 153 x 70 mm)
Degree of protection acc. to DIN 60 529	IP 64 (with protection cap) / IP 53 (without protection cap)
Installation on DIN rail:	DIN rail mounting kit (optional accessories)
Operating temperature:	-40°F to 131°F / -40 °C ... +55 °C
Storage temperature:	-40°F to 185°F / -40 °C ... +85 °C
Relative humidity:	5 % ... 95 % (non-condensing)
Vibration:	EN 60 068-2-6, 10 Hz to 150 Hz: 0.075 mm / 1g
Shock:	EN 60 068-2-27, Acceleration: 30 g

## Norms & Safety

Radio License:	EN 302 208 / FCC 47 FCR Part 15 / IC RSS-GEN, RSS-210 / SRRC (China) (US version) / Japan
EMC:	EN 301 489

Low voltage: EN 60 950  
 Human Exposure: EN 50 364  
 RoHS compliant

**Railway (rolling stock)**

Isolation: EN 50 155  
 EMC: EN 50 121-3-2 (with protection cap and ferrite cores),  
 EN 50 121-4 (with protection cap and ferrite cores)  
 Vibration: EN 61 373 Cat. 1B  
 Shock: EN 61 373 Cat. 1B  
 Wet heat (cyclic): EN 50 155 / EN 60 068-2-30  
 Fire protection: EN 45 545

**Product Drawing:**

