



SYNOTag | **Active**™

SMPD-400-R/O or R/W 2.4 GHz Active RFID Reader

2.4 GHz active RFID reader with read range of up to 80 meters for use with 2.45 GHz active RFID tags in vehicle access control, vehicle toll collection, RFID asset tracking, manufacturing, personnel tracking and building access control applications.

Key Features

- Long range 2 to 80 meters (Adjustable by attenuator)
- Global 2.4GHz ISM Band, Anti-collision up to 200 tags
- Supports identification of fast moving objects with speeds of up to 200 KmH
- Omni-directional or oriented antennas
- Data encryption for security
- Communicate with computer through RS232/483/Wiegand 26 or wirelessly
- Supports Visual Studio .NET
- Dimension: 260 mm x 260 mm x 70 mm
- Weight: 4.4 kg
- Applied channel isolation technology, no interference between equipment
- Customized microwave work modes, adjustable transmission power

Specifications

Mechanical

- Dimension: 260 mm x 260 mm x 70 mm
- Humidity: 100% Non-condensing
- Shock: 1~2000 Hz 15g 3 axial
- Shell Material: ABS + Cast Aluminum
- Weight: 4.4 kg
- Mounting: Pole or Beam Mounting

Hardware Interface

- DC9V In power supply DC9V/500mA or DC12V/500mA adaptors
- Wiegand Interface: Chose Wiegand 26 or Wiegand 34
- RS232/485 Interfaces
- Input Interface: Switch signal or spare
- Buzzer/LED: Interface to external buzzer with DC9V power or LED

SMPD-400 Active RFID Reader

Visit us at www.synometrix.com or email us at info@synometrix.com

SYNOTag™ | **RFID**

For further information please contact:
John Hannon, Managing Director
SYNOMETRIX | **Asia Pacific** Taipei, Taiwan
IDD: +886 2 2758 1279

Microwave Link

- Modulation: Uplink/Downlink GFSK
- Frequency: 2.4 - 2.4835 GHz
- Low Power Transmission:
Less than 1mW 0dBm (software adjustable)
- Antenna Polarization: Circular
- Microwave Communication Range:
▸ 2-80 meters (Adjustable by attenuator)
- Microwave Communication Error Check:
▸ Cyclical Redundancy Check (CRC 16)
- Data Encryption: Confidential
- Bit Error Rate BER: 10-7

Electrical

- Interface: Baud Rate 4800-115200
- Power Supply: RS232/485: +6 ~ +12V DC Max 500mA
- Current Consumption: 50mA
- Communication: RS 232/485/Wiegand

Environmental

- Temperature: -40 to 80C (Operating) -60 to 80C (Storage)
- EMI: 10V/m 0.1~1000 MHz AM electromagnetic wave
- Reliability: MTBF 70000 Hours
- Worklife: 15 years

Bit Setup Description

- Bit 1-3: 0-7 Reader Address
- Bit 4: 0: Buzzer and LED off 1: Buzzer and LED on
- Bit 5&6: 0: RS232 1: RS485 2: Wiegand 26 3: Wiegand 34
- Bit 7&8: 0:2200
- Baud Rate Set: 1=4800 2=9600 3=38400

Data Connection

- Red: DC 9V-12V (+)
- Black: DC 9V-12V (-)
- Orange: Wiegand D0
- Brown: Wiegand DI
- Blue: RS232-RX
- White: RS232-TX
- Yellow: RS485-A
- Green: RS485-B
- Purple: Buzzer (+)
- Gray: Buzzer (-)

SMPD-400 Active RFID Reader

Visit us at www.synometrix.com or email us at info@synometrix.com

SYNOTag™ | **RFID**

For further information please contact:
John Hannon, Managing Director
SYNOMETRIX | **Asia Pacific** Taipei, Taiwan
IDD: +886 2 2758 1279