

Spartan Arduino PLC 16DA and 16RDA

Product Overview

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For the most up-to-date information, visit www.mouser.com or the supplier's website.

Description

DFRobot Spartan Arduino PLC 16DA and 16RDA are industrial Programmable Logic Controllers (PLC) with optoisolated output and relay output respectively. The DFR0902 optoisolated output feature eight inputs(digital and analog) and eight outputs(analog and digital/PWM isolated). The DFR0903 relay output feature eight inputs and six outputs (digital relay output). These devices use an Arduino Leonardo for a direct program through a USB. The spartan PLC are all standardized and can be programmed precisely in the same way. These controllers offer communication through I²C by a master-slave connection that can connect up to 127 modules.



Features

- Easy to programming
- Standardized controller
- **DFR0902:**
 - With eight inputs and eight outputs
- **DFR0903:**
 - With eight inputs and six outputs

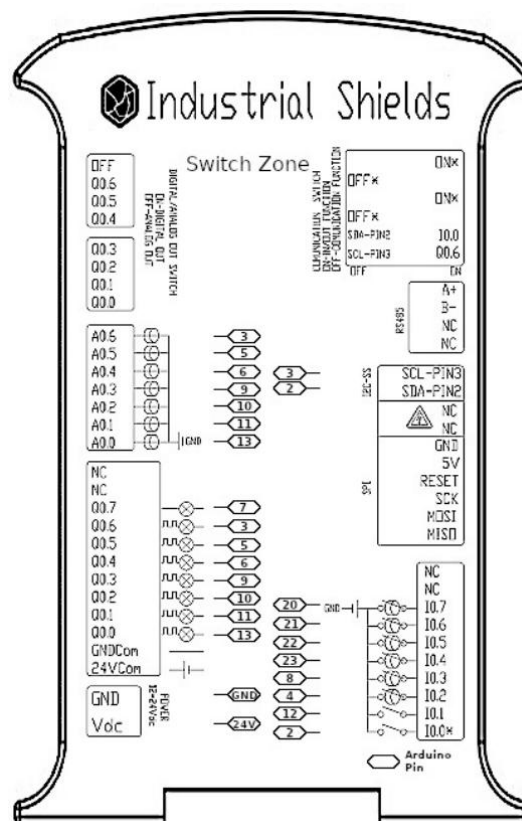
Specifications

- 12V_{DC} to 24V_{DC} (Fuse protection (2.5A) polarity protection) input/supply voltage range
- 24V_{DC} input-rated voltage
- 30W rated power
- 1.5A maximum current
- 100mm x 45mm x 115mm size
- 16MHz clock speed
- 32kB (Bootloader uses 4kB) flash memory
- 2.5KB SRAM
- 1KB EEPROM
- I²C, USB, RS485 (HD), SPI, and TTL communication interface

Specifications

- 11.4V_{DC} to 25.4V_{DC} operating voltage range
- 0°C to 60°C operating temperature range
- 10% to 90% (No condensation) operating humidity
- No corrosive gas operating environment
- -20°C to 60°C storage temperature range
- 0V_{AC} to 10V_{AC} analog input voltage range
- 5V_{DC} to 24V_{DC} digital input voltage range
- 5V_{DC} to 24V_{DC} interrupt input voltage range
- I²C-127 elements, serial port, and RS485 expandability
- **DFR0902:**
 - Spartan Arduino PLC 16DA mode type
 - 0V_{AC} to 10V_{AC} analog output voltage range (8bit)
 - 5V_{DC} to 24V_{DC} digital isolated output voltage range
 - 5V_{DC} to 24V_{DC} PWM isolated output voltage range (8bit)
- **DFR0903:**
 - Spartan Arduino PLC 16RDA mode type

Controller Overview



Mouser Part Number

[View All Parts](#)

To learn more, visit <https://www.mouser.com/new/dfrobot/dfrobot-spartan-arduino-plc/>