Overview

The 4xSPI Independent Range Extenders are designed to provide a robust solution for distributing SPI signals across multiple channels. This device facilitates the amplification and independent operation of four channels, making it an ideal choice for long-distance communication in complex applications. By ensuring optimal signal integrity and reliability, the 4xSPI Independent Range Extenders empower users to efficiently control multiple SPI devices, such as LED addressable strips, without compromising performance. Whether in demanding environments or extensive installations, these extenders offer the flexibility and scalability required for modern SPI communication systems. When paired with ACL-SPI-EXT-Rx receivers, the 4xSPI Range Extender guarantees stable and consistent performance over extended distances, making it an essential tool for projects that demand precision and scalability across multiple SPI outputs.

Features

Signal Range Extension

Extends the reach of SPI signals over long distances, making it ideal for complex installations where signals need to cover large areas.

High-Speed Data Handling

Supports high-speed SPI data rates, meeting the demands of fast and responsive LED displays and lighting systems.

Multi-Voltage Support

Compatible with both 3.3V and 5V TTL-SPI logic levels, providing versatility across various lighting systems and LED devices.

Compact and Robust Design

Features a compact, durable design that easily integrates into existing setups without occupying excessive space.

Plug-and-Play Operation

Simple, intuitive installation with minimal configuration required, allowing for quick and easy setup.

Power Supply Flexibility

Operates on input voltages 12V DC or 24V DC, ensuring flexibility across power supply configurations.

Reverse Polarity and Short Circuit Protection

Integrated protection against reverse polarity and short circuits, ensuring safe operation.

LED Power Indicator

Provides visual feedback for power status, aiding in monitoring and trouble-shooting

Wide Operating Temperature Range

Designed to function in harsh environments with an operating temperature range from -20 $^{\circ}\text{C}$ to +55 $^{\circ}\text{C}$.

Specifications

Operating Voltage...... DC 12V / 24V Class 2 Power Supply

Outputs...... 4
Compatible Range Extender

Signal In...... TTL-SPI - Channel 1 to 4

Signal Out...... Corresponding Differential SPI Outputs

Ch 1 to 4

Cerifications...... cULus Certification

Wire Port Connections:

Terminal Block

12V ~ 24V DC Power Input V+, G
TTL-SPI Signal In Ch 1 to 4 Signal S, G

RJ45

Corresponding Differential 1, 2, 3, 4 SPI Outputs Ch 1 to 4

Power Indicator

Green LED Light on when 12V / 24V DC Power In



















Compatible Power Supplies

	Power Supply Part Number	Output Watts	Input Voltage	Output Volts DC
12V	ACV125-120-277V	60W	120-277	12.0
	ACV2125-120-277V	120W (60 + 60)	120-277	12.0
	ACV3125-120-277V	180W (60 + 60 + 60)	120-277	12.0
	CVW125-120-277V*	60W	120-277	12.0
	CVW2125-120-277V*	120W (60 + 60)	120-277	12.0
	CVW3125-120-277V*	180W (60 + 60 + 60)	120-277	12.0
24V	CV244-120-277	96W	120-277	24.0
	CVW244-120-277*	96W	120-277	24.0
	CVW2244-120-277*	192W (96 + 96)	120-277	24.0
	CVW3244-120-277*	288W (96 + 96 + 96)	120-277	24.0

*IP68 rated





