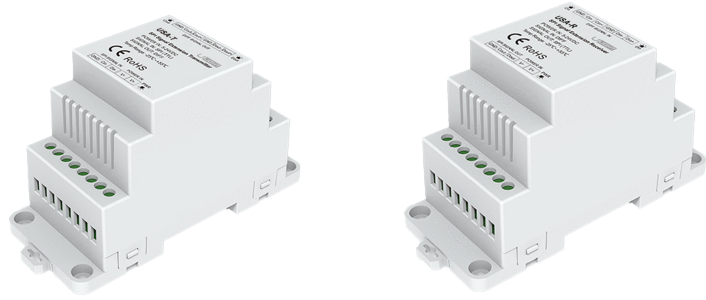


SPI signal extension transmitter (USA-T) converts SPI (TTL) signal input to differential signal output.

SPI signal extension receiver (USA-R) converts differential signal inputs to SPI (TTL) signal outputs.

Use with SPI controller to extend SPI signal transmission, distance up to 120 metres.

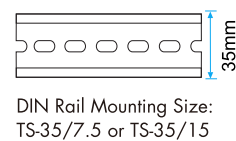
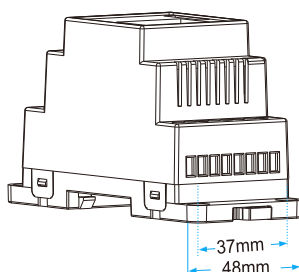
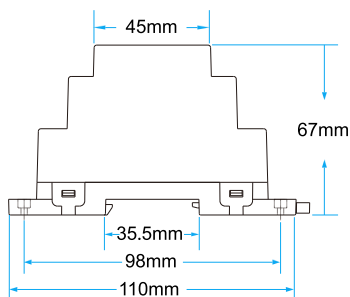
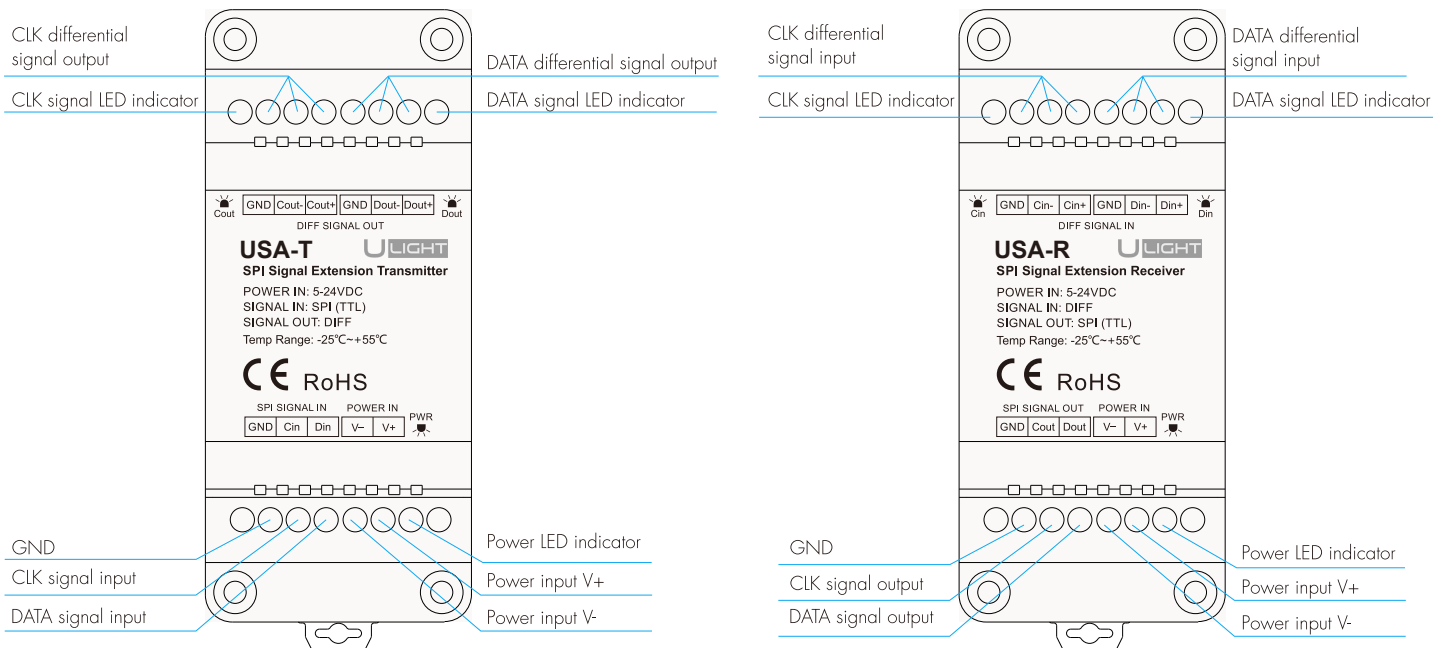


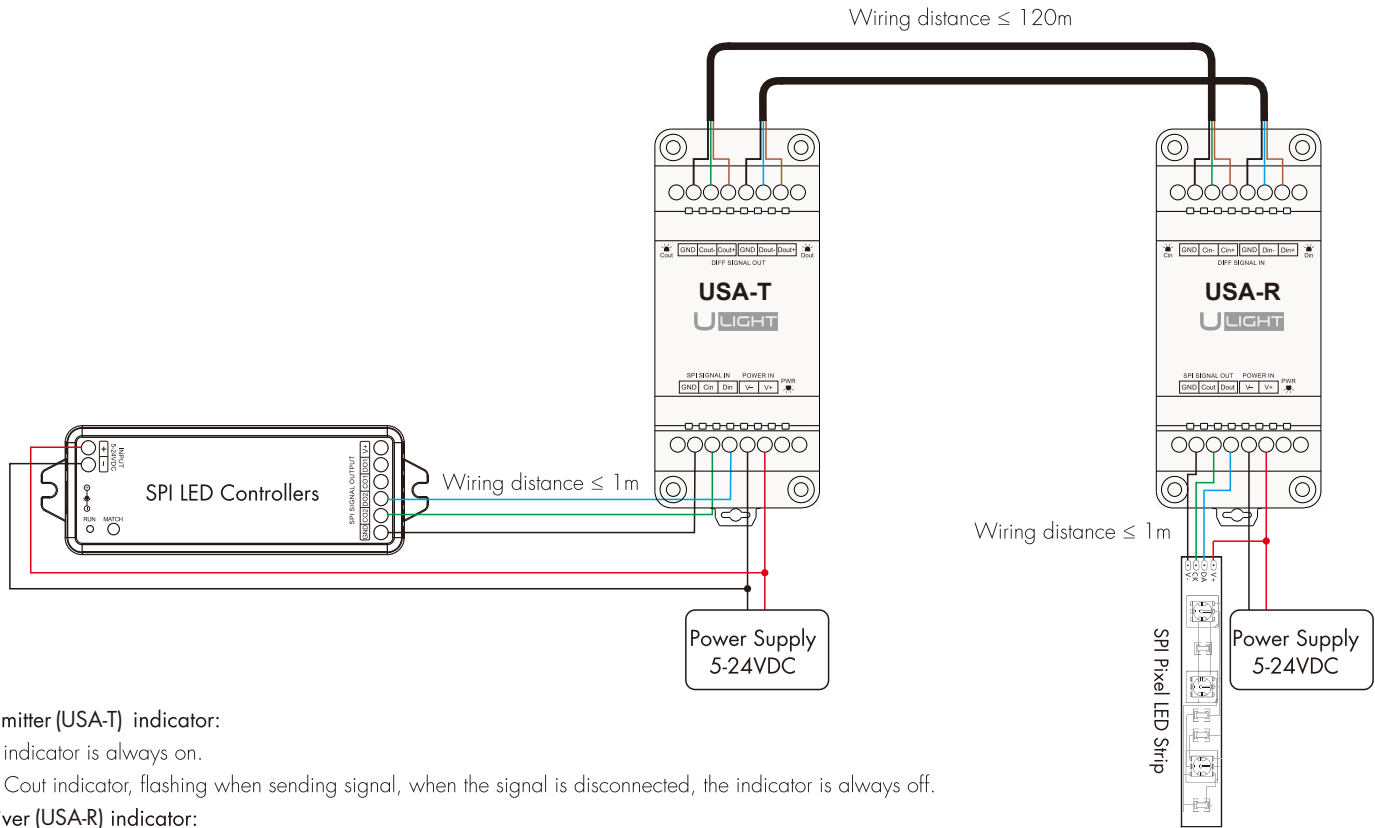
CE RoHS

Technical Parameters

Input and Output		Environment		Safety and EMC	
Input voltage	5-24VDC	Operation temperature	Ta: -25°C ~ +55°C	EMC standard	EN IEC 55015 EN IEC 61547
Input signal	USA-T: SPI/TTL (DATA+CLK) USA-R: Two differential signal	IP rating	IP20	Safety standard	EN 61347-1/-2 EN 62493
Output signal	USA-T: Two differential signal USA-R: SPI/TTL (DATA+CLK)	Package		Certification	CE RoHS
Warranty and Protection		Size	L120 x W78 x H55mm		
Warranty	5 years	Gross weight	0.125kg		
Protection	Reverse Polarity				

Mechanical Structures and Installations





Transmitter (USA-T) indicator:

PVWR indicator is always on.

Dout, Cout indicator, flashing when sending signal, when the signal is disconnected, the indicator is always off.

Receiver (USA-R) indicator:

PVWR indicator is always on.

Din, Cin indicator, flashing when receiving signal, when the signal is disconnected, the indicator is always on.

Note:

1. USA-T/USA-R supports 2 sets of differential signals transmission.
If the SPI LED pixel strip is in single-wire control mode, only one set of differential ports need to be connected.
2. The signal lines (DATA, CLK) should be installed at a distance of $\ge 15cm$ from strong electrical power (100-240VAC) lines to avoid the creation of magnetic fields that may interfere with the transmission of signals.
3. Signal transmission distance and the use of wire and environment related, if the use of complex environment and interference, recommended the use of shielded twisted pair cable or super category 5 cable, can effectively reduce electromagnetic interference, to ensure the stability of signal transmission.