

LSH4

Level Shifter

List of functions

- Shifting of digital input signal voltage level
- Galvanic isolation of the output signals in relation to the input signal
- Module power supply 12- 24VDC
- LED indication of input signal and power supply
- 4 identical digital output signals with voltage level equal to that of power supply (12-24VDC)



Function description and application

LSH4 is the module for shifting the voltage level of the digital input signal and providing of galvanic isolation of output signals relative to the input signal. Digital input signal passes through the optocoupler and enters the driver which forwards it to four outputs. Output signal(s) voltage level is equal to power supply voltage level (12-24VDC). The input signal voltage level can be 5VDC, 12VDC or 24VDC, which can be adjusted by jumpers.

Design

Module dimensions 100x23x88 mm. Designed for mounting on 35 mm wide DIN rail.

Technical specifications

Characteristics of digital input signal

- | | |
|------------------------------------|-----------------------------------|
| • Interface type and voltage level | Optocoupler 5VDC, 12VDC, 24VDC |
| • Frequency | 0 – 100kHz |
| • Galvanic isolation | 2kV between input and electronics |
| • Input current | 2.2 mA |

Characteristics of digital output signals

- | | |
|-----------------|-------------------|
| • Signal type | 4 digital signals |
| • Voltage level | 12-24VDC |
| • Frequency | 0 – 100kHz |

LED indicators

- | | |
|-------------|---|
| • Diode RUN | Indication of input signal presence – diode changes status following the beat of input signal frequency |
| • Diode PWR | Indication of power supply |

- | | |
|---------------------|--------------------------------------|
| • Power supply | 9 – 24VDC |
| • Power Consumption | 100mA@24VDC with 1KΩ load per output |
| • Temperature range | 0 - 70°C |
| • Relative humidity | 5 - 95% |