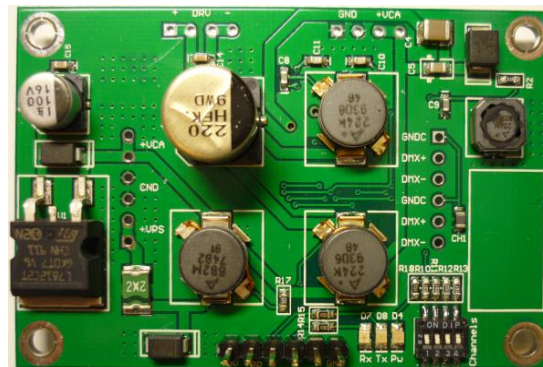


# DMX512 DC Powerline Modem

## Datasheet

### Transmission of 1 to 8 RGB color channels over DC powerline at 4800Bd

- Wide input voltage range: 14 to 35VDC
- Wide temperature range: 0-70°C
- Maximum current 4,7A
- FSK modulation at 60kHz
- Low power consumption (360-1200mW)
- DMX512 compliant
- Selectable number of RGB channels (1-8)
- Chain and bus connection mode
- CRC check for robust transmission
- Over current/temperature protection
- Reverse polarity protection
- Status LED's (power/Tx/Rx/temperature alarm)



Typical applications: LED lightning with existing cabling (garden, swimming pool, indoor, ...)

### 1. Dipswitch settings

DIP SWITCH		
	function	
nr	0	1
1	C3	
2	C2	
3	C1	
4	receiver	sender

C3	C2	C1	RGB channels	Total burst length [Bytes]	Total burst transmission time [ms]
0	0	0	1	9	15
0	0	1	2	13	21,67
0	1	0	3	15	25
0	1	1	4	19	31,67
1	0	0	5	21	35
1	0	1	6	25	41,67
1	1	0	7	27	45
1	1	1	8	31	51,67

### 2. Maximum ratings

Voltage range	14 to 35VDC
Maximum current	4,7A/2pins on power input and cable connectors 0,69A on driver output
Operating temperature range	0° to +70°C

### 3. Electrical and DMX timing characteristics

Power consumption	360 to 1200mW	Mark after break	300µs
Baud rate	4800Bd	Inter byte gap	18,8µs
Carrier frequency	60 kHz	Mark before break	≥6500µs
Modulation type	Frequency Shift Keying	Start bit	0
Deviation	1 kHz	Stop bit	1
Sensitivity	0,5mVrms	Start byte	0x00
		Baud rate	250KBd
		Receiver input impedance	12kohm non terminated
		Receiver input sensitivity	200mV
		Receiver input hysteresis	50mV

Pricing and info: [info@saleconix.be](mailto:info@saleconix.be)

Document revision: 0.2  
Date: 24/11/2013