

# Interface converter CTS-RS232/422



Identification	Type	CTS-RS232/422
	Part-No.	750231
Product version		
Datasheet version	01	
Use/Application/Properties		
Description	Data transfer module for communication between a test object and a computer, suitable for usage in the railway sector. It is possible to establish a switch-over from "internal" to "A<->B" via communication over a short distance with a module (within a carriage) or over a distance of up to 1200 m with 2 modules (e.g. between carriages A and B).	
Input		
Nominal voltage $U_N$	DC 24 V - 110 V	
Voltage range	DC 16.8 – 140.0 V	
Rated current (at $U_N$ )	55 mA at DC 16.8	
	35 mA at DC 24 V	
	7 mA at DC 140 V	
Reverse voltage protection	Yes	
Status indication LED	LED green $U_{L1}$ and $U_{L2}$	
Connection	(X1): Terminal strip with cage-clamp connection, 3-pin, 0.08–2.5mm <sup>2</sup> (AWG 28-12)	
V24 (RS232) side	<b>Connection (X3, X4):</b>	
	X4 test object: spring-type terminal, 4-pin 0.08-2.5 mm <sup>2</sup> (AWG28-12);	
	X3 laptop: sub-D header 9-pin	
	<b>Internal/external operation:</b> switch-over by means of slide switch	
	internal communication between X3 and X4	
	external communication between 2 modules (test object<->Laptop)	
	<b>Communications display:</b> LED yellow	
	TxD: X3, X4, pin 3	
	RxD: X3, X4, pin 2	
	<b>Shielding:</b> X4, SHD	
<b>GND:</b> X3, pin 5 / X4, pin GND		

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## V11 (RS422) side

**Connection (X2):** spring-tension clamp-type terminal 2-pin 4–2 mm<sup>2</sup> (AWG 28-12)

**Communication display:** LED yellow

**Rx+:** Rx+

**Rx-:** Rx-

**Tx+:** Tx+

**Tx-:** Tx-

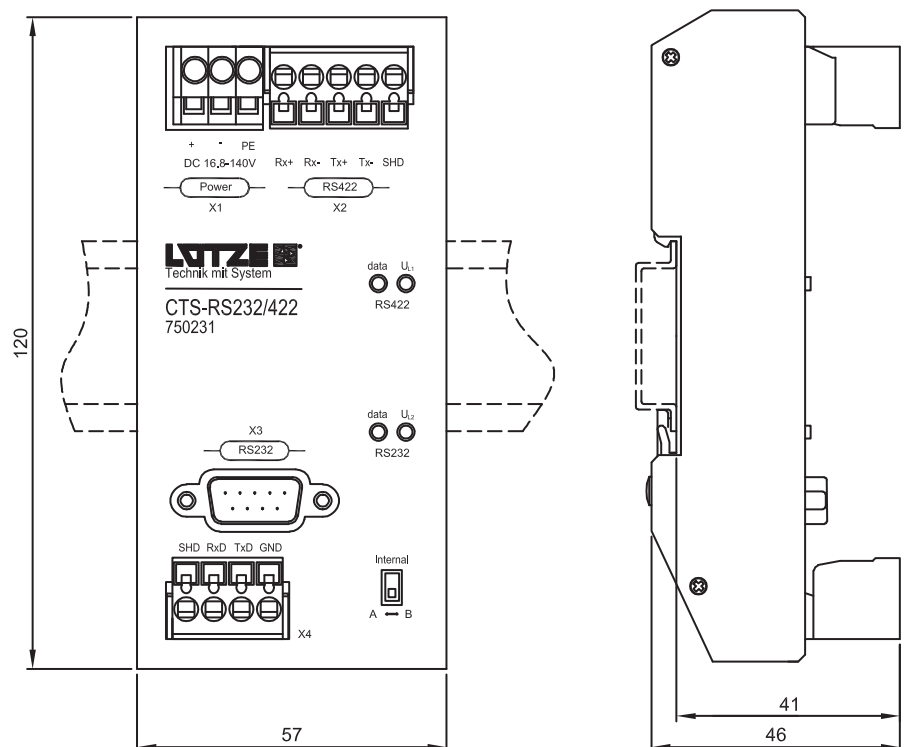
**Screening:** SHD

## General

Transfer rate	max. 50 kBaud
Transmission medium	Twisted Pair
Transmission distance	Max. 1200 m
Electrical isolation	3-way separation: optocoupler in the transmit and receive circuit, and separate power-supply units for supplying the V24 and V11 sides.
Protection class	IP 20 (with cover for the Sub-D plug connector)
Dimensions (w x h x d)	57.0 x 120.0 x 47.0 mm
Operation temperature range	-40 °C – 85 °C (Tx)
Storage temperature range	-40 °C ... 85 °C
Weight (kg/piece)	0.172 kg/piece
Rated insulation voltage	150 V
	Contamination level 2
	Over voltage category III
Standards	Electronic equipment on railway vehicles: EN 50155
	Electromagnetic compatibility: EN 50121-3-2
	Insulation coordination: EN 50124-1
	Vibrations and shocks: EN50155/61373

The standard applicable to this product is dependent on the version available for development. The standards applicable to this product are available on request.

## Dimensions



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### Circuit diagram

