



KL6021, KL6041 | Serial interface RS422/RS485

The KL6021 and KL6041 serial interfaces allow devices with an RS422 or RS485 interface to be connected. The device connected to the terminal communicates with the automation device via the Bus Coupler. The active communication channel operates independently of the higher-level bus system in full or half duplex mode at up to 19,200 baud or 115.2 kbaud (KL6041). The transmission of differential signals conforms to RS422 and guarantees high immunity to interference through electrically isolated signals.

Technical data	KL6021 KS6021	KL6041 KS6041
Data transfer channels	TxD and RxD, full/half duplex	
Data transfer rates	9,600 baud, 8 data bits, no parity and one stop bit are preset (max. 19,200 baud)	9,600 baud, 8 data bits, no parity and one stop bit are preset (max. 115,200 baud)
Bit transfer	with differential signal	
Line impedance	120 Ω	
Cable length	approx. 1,000 m twisted pair	
Power supply	via the K-bus	
Current consumption K-bus	typ. 65 mA	
Electrical isolation	500 V _{rms} (K-bus/signal voltage)	
Data buffer	128 bytes receive buffer, 16 bytes transmit buffer	1,024 bytes receive buffer, 128 bytes transmit buffer
Bit width in the process image	input/output: 3 x 8 bit user data, 1 x 8 bit control/status (up to 5 x 8 bit user data are possible)	input/output: 22 x 8 bit user data, 2 x 8 bit control/status (up to 22 byte user data are possible)
Configuration	no address setting, configuration via Bus Coupler or controller	
Protect. class/installation pos.	IP 20/variable	
Pluggable wiring	for all KSxxxx Bus Terminals	
Further information	www.beckhoff.com/KL6021	

Special terminals	
KL6021-0020	standard format 5 bytes of user data (rest default)
KL6021-0021	standard format 5 bytes of user data (7 bits, even, 1 stop bit, 9,600 baud)
KL6021-0023	serial Bus Terminal for processing the RS485 signals from the KL6023 wireless adapter with EnOcean radio technology

Accessories		
TwinCAT PLC Serial Communication	IEC 61131-3 software library for TwinCAT PLC for communication via serial Bus Terminals or PC COM ports	1170
TwinCAT PLC Serial Communication 3964R/RK512	licence for using the IEC 61131-3 software library for TwinCAT PLC for communication via serial Bus Terminals or the PC COM ports using the protocol 3964R/RK512	1170
TwinCAT PLC Modbus RTU	IEC 61131-3 software library for TwinCAT PLC with Modbus RTU function blocks for serial communication with Modbus devices	1171