

Background information:

TTL Interface

Basics

The device-internal pre-stage of asynchronous serial interfaces such as RS232, RS422, RS485, 20mA and fiber optics are TTL signals which are provided by the controlling chip (UART, processor or similar). Only by using a corresponding transceiver chip is the interface later provided to the user determined.

If this solution is hardwired on the control card, a simple change in the physical interface always means a costly board redesign. By standardizing a plug connection on the device-internal TTL side and by using corresponding interface modules, the effort required to adapt the interface standard is limited to changing out a plug-in module.

At the present time modules for RS232 (with DTE and DCE configuration), RS232/RS422/RS485, RS422/RS485, Profibus, 20mA, as well as for plastic fiber optics and glass fiber optics with ST connector are available.

Likewise, it is of course also possible to equip the W&T standard serial Com-Servers and serial PC cards with your own modules for implementing special interface types.

Signals and Connectors

All signals for the W&T internal, serial TTL interface are brought out to a post connector with 2mm spacing. Depending on the module, various numbers of status and control lines are supported.

The signals are configured on the post connector of the motherboards as follows:

Pin	Direction	TTL signal	Pin	Direction	TTL signal
1	Output	5V \pm 5%	7	Output	DTR
2	Input	RI	8	Input	DSR
3	Input	RxD	9	Output	RTS
4	Output	TxD	10	Input	DCD
5		NC	11	Output	12V \pm 20%
6	Input	CTS	12	Output	GND