



BURGER v1





What is Bidirectional Universal RS232-RS485 Signals Converter (BURGER)?

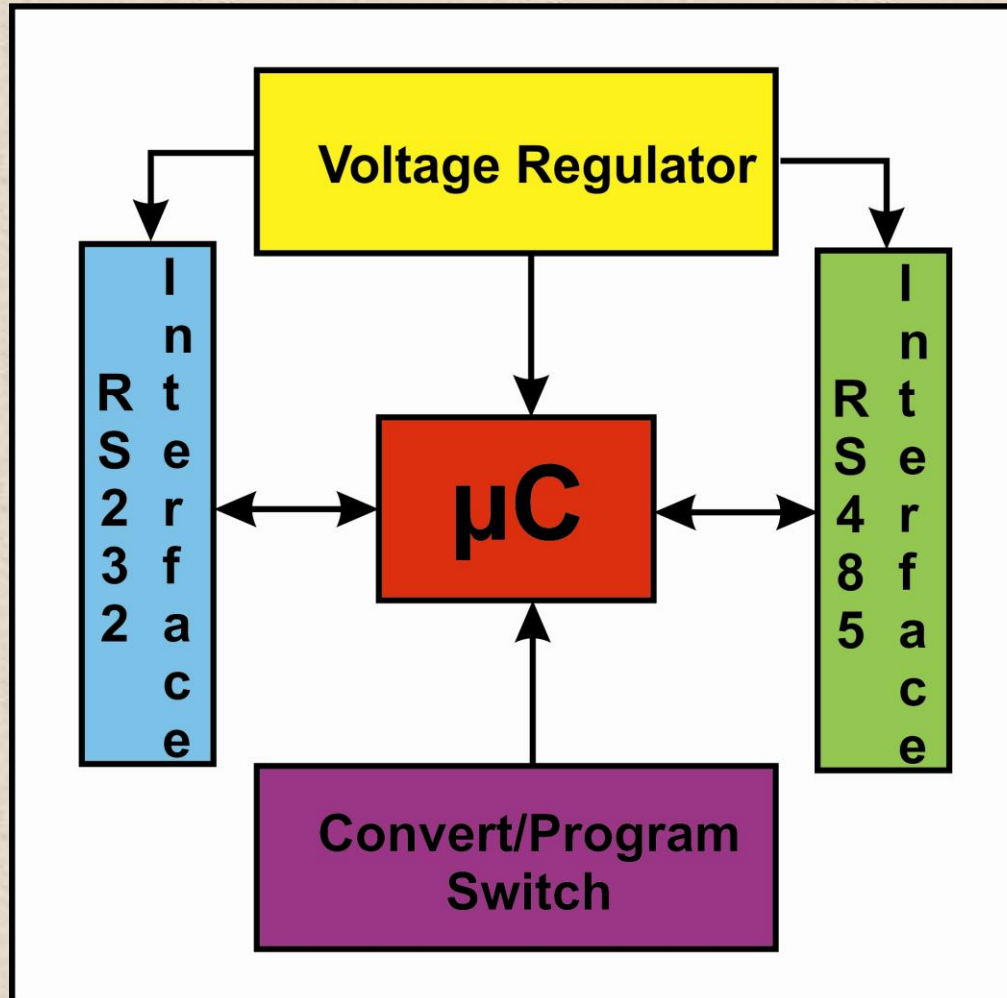
- ▶ Converts signals from RS232 to RS485 standard and from RS485 to RS232 standard
- ▶ Automatically detects the conversion direction
- ▶ Full-duplex transmission on RS485 side
- ▶ Easy connected
- ▶ Easy mountable termination resistors
- ▶ Based on Atmel's ATtiny88PA microcontroller
- ▶ Programmable on commands basis
- ▶ Programatically addressable
- ▶ Stores last settings in flash memory
- ▶ Low power consumption
- ▶ Wide range of supply voltages



- ▶ **Cheap**
- ▶ **Easy to use**
- ▶ **Usageable in Cluster-Jet Target Detector of PANDA**
- ▶ **Dimensions: 119mm x 79mm**

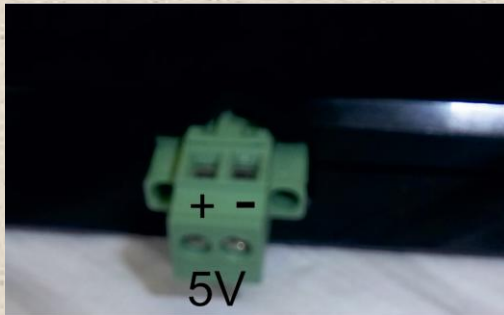


Block diagram





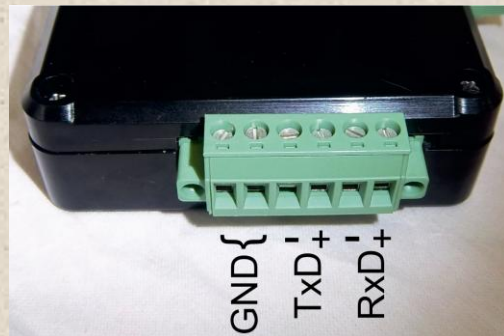
Connectors and mode switch with LED



Power



RS232



RS485



Mode switch and LED (LED off – Working Mode, LED on – Programming Mode)

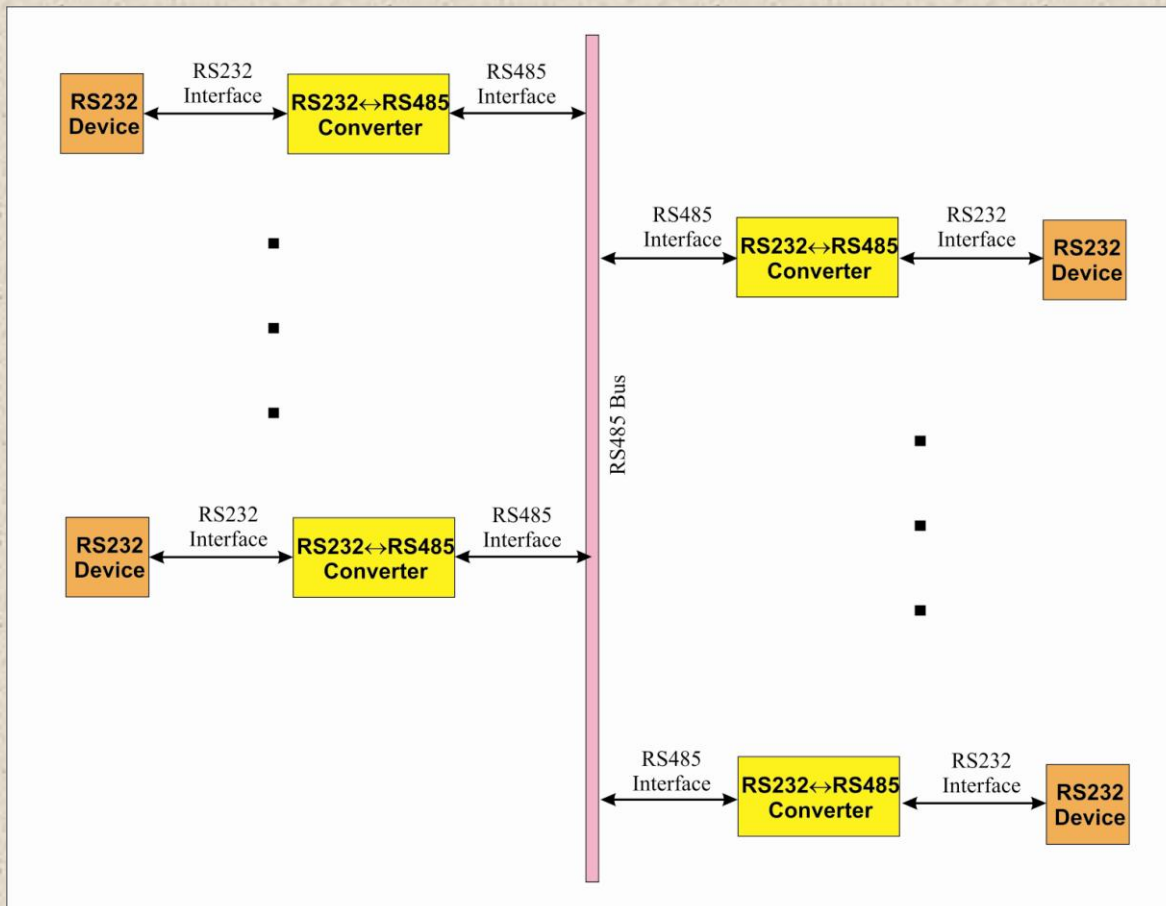


Programmable parameters

- ▶ **Device address from 0 to 31**
- ▶ **Transfer ratio from 2,4kb to 250kb**
- ▶ **Stop bits number (one or two)**
- ▶ **Parity (no parity, odd, even)**



Example of BURGER utilisation in Cluster-Jet Target Detector of PANDA



E.g. vacuum gauge controller CENTER THREE is equipped with RS232 interface and we can connect few of them to one RS485 bus using BURGER converters where every one has a unique address