

# PROCENTEC



## ComBricks

RS 485 Intrinsic Safety barrier

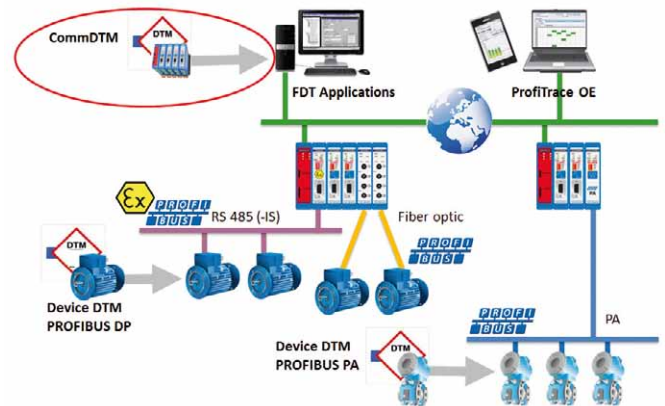
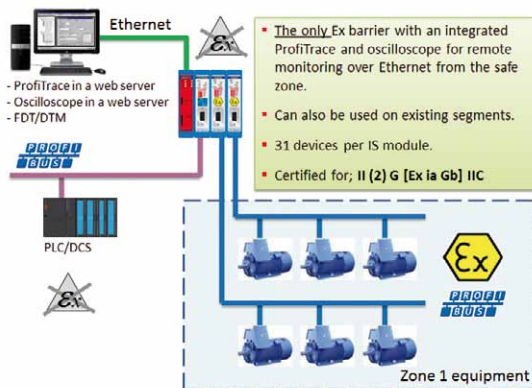
The ComBricks RS 485 Intrinsic Safety barrier is the first unique tool to create segments for use in potentially dangerous explosive atmospheres. It is the only available product for remotely monitoring IS segments over Ethernet from the safe zone. Because of the permanent mounting of the barrier, the user does not have to touch the installation anymore. This avoids lots of hot permits and other paper work. This unique product allows technicians to remotely monitor and maintain PROFIBUS installations in dangerous explosive atmospheres from the safe zone.

The RS 485-IS barrier complies with the specifications for PROFIBUS DP in IS segments and drives 31 RS 485-IS PROFIBUS DP devices. ProfiTrace and an Oscilloscope are integrated and suitable for Intrinsic Safety. As an alternative it can also be used as a busmonitor on existing IS segments created by third party barriers. The IS barrier can be mixed on the backplane with other ComBricks modules like, the PROFIBUS PA, Fiber Optic and regular RS 485 modules.





## Applications



## Product features

### Electrical and Mechanical

- 1 Bus channel
- 31 devices/bus-loads per channel
- 1200 m cable length (depends on baudrate)
- 1 DB9 connector

### Protocol

- Transparent for all PROFIBUS protocols
- 9.6 kbps - 1.5 Mbps (auto detection)
- 2 bits delay time (12 bits in redundant mode)
- No address required
- Bus redundancy (selectable)

### ATEX (electrical)

- $U_o = 4.2 \text{ V}$
- $I_o = 149 \text{ mA}$
- $U_i \geq 4.2 \text{ V}$
- $L_i \approx 0 \text{ } \mu\text{H}$
- $C_i = \text{Negligibly small}$
- Output characteristic: Linear

### ATEX (compliance)

- II (2) G [Ex ia Gb] IIC
- EN-IEC60079-0: 2009
- EN-IEC60079-11: 2012
- EN-IEC60079-25: 2010
- Certification number: DEKRA 12ATEX0192
- Compliant with the PNO RS 485-IS Installation Guidelines V1.1

### Oscilloscope

- Frequency: 192 MS/s
- Resolution: 27 mV
- Differential range: -3.49..+3.49 V

### Backplane

- 4 Networks selectable with switches
- 10 Modules (positioned in the first 10 slots)
- 450 mA current consumption

