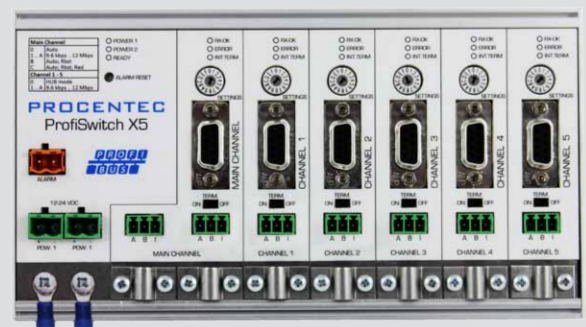# PROCENTEC

ProfiSwitch X5

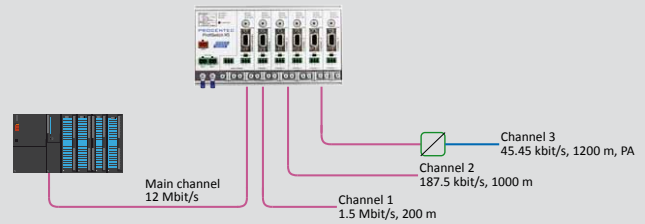## PROFIBUS Reborn: 1 Controller, 1 Network, Multiple Baudrates

The ProfiSwitch X5 modernizes PROFIBUS network architecture for the next generation. The transparent repeater hub has the ability to create baudrate customization per channel. A simple rotary switch opens doors to a new landscape with reliable and money saving applications.

The X5 eliminates traditional PROFIBUS network baudrates constraints associated with spur lines, additional resistance, single master systems, poor cable segments and cable length limitations. Design limitations associated with legacy systems or new build systems are eliminated, creating the capability for unprecedented customizable network designs. One main PLC can now act as a workhorse with the ability to extend the network further, spur line hot swap, reduction of repeater installation, all without limiting speed performance. The advanced technology of the ProfiSwitch X5 converts the main channel to other transmission speeds and acts as a transparent proxy without disturbing the host system (comparable with PA links). With limitless applications, the ProfiSwitch X5 will become your go to device for creating networks without traditional limitations.
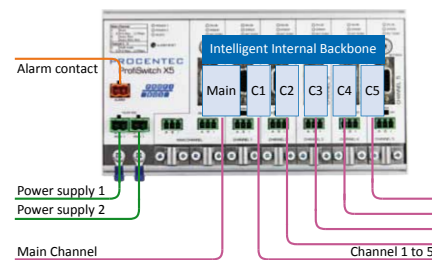
Application areas

- Extend Network length, without repeaters
- Adding to Legacy Systems with Baudrate limitations
- Couple PA & wireless within 1 network
- Eliminate none traditional cabling limitations
- Bad Segment Isolation
- EMC interference reduction
- Reduce Resistance effects, i.e. lightning arrestors.
- Limited speed PROFIBUS devices, operating on high speed networks

Main channel
12 Mbit/s

Channel 3
45.45 kbit/s, 1200 m, PA

Channel 2
187.5 kbit/s, 1000 m

Channel 1
1.5 Mbit/s, 200 m

Example: one network, multiple baudrates, different cable lenghts.

Your benefits

- Cable length limitation removed
- One master for different network types
- No more design limits
- Cost saving
- Coupler to any PB device
- Suitable for all DP cables
- Short circuit protection on each channel
- Insertion and removal of devices during operation
- Faster update times
- Less repeaters

Intelligent Internal Backbone

Alarm contact

Main C1 C2 C3 C4 C5

Power supply 1
Power supply 2

Main Channel

Channel 1 to 5

Product features

- Various baudrate distribution
- Faster cycle time
- Legacy host systems
- 9.6 Kbps - 12 Mbps
- 5 Isolated repeater channels
- Transparent for all PROFIBUS DP - protocols
- 31 Devices per channel
- Integrated termination facilities
- Redundant power supply
- Switch contact for errors
- Configurable grounding system

Example: 1000m cable at 187.5 kbit/s

Max 31 devices

Example channel
with different max
cable length

Slave   Slave   Slave   Slave   Slave   Slave

PROFI BUS