

Control and monitor  
this point from the  
operations room.



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## HubBus - Long Range Monitoring System

HubBus is a distributed I/O system that allows communications from controller to field device and vice versa. HubBus is a long range data bus for I/O monitoring and control, with the unique feature of devices being downline powered from the one signal line. The number of devices is configurable from 64 to 2048.

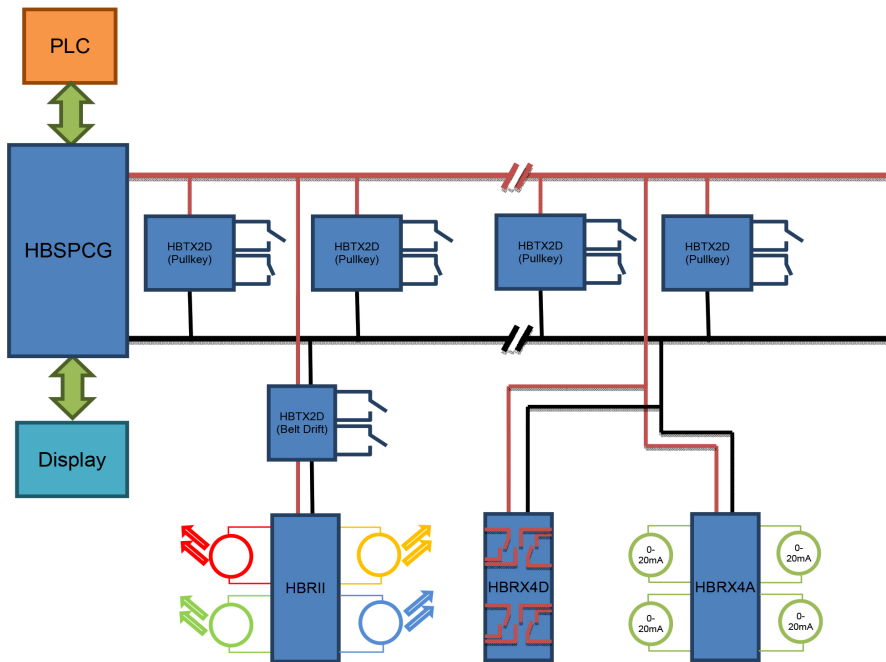
The basis of data transmission along the HubBus is that of pulse-width-modulation for outbound communications and dual current detection for inbound communications\*.

Each I/O address pair toggles its inbound and outbound state on adjacent pulses. This technique allows for unit detection (and removal detection) and gives improved noise immunity from false triggers.

To guard against stuck addresses and interference from other transmitters inadvertently coded to the same address the pulse pair for each device toggles its state every second pulse train cycle. This is controlled with the cycle sync bit in the control pulses at the start of the pulse train.



## Typical System Configuration



## Typical Applications

- Conveyors
- Coal/Ore loaders
- Stacker/Reclaimers
- Coal Washeries
- Bulk Material Handling Applications
- Pipelines
- Irrigation
- Building Automation and Security
- Parking Stations
- Stadiums and Arenas

## System Features

- Line length 16km plus (for longer distance requirements contact Austdac)
- Over 320 line powered devices (2.5mm<sup>2</sup> cable)
- Configurable bandwidth and number of input/output channels
- Unique dual receiver for inbound signals for immunity against noise from triple variable frequency drives, switching transients etc.
- 2048 addressable devices
- Integrated pull-key assembly, no need for a junction box
- Low voltage system, uses standard 48VDC supply
- System Exception feature for faster event response times

## Available Modules

<b>HBSPCG</b>	Single port channel generator (capable of supplying over 2A to the line)
<b>HBTX2D</b>	2 channel digital transmitter (line powered) or safety pull key transmitter with normally open and normally closed contact inputs (line powered)
<b>HBTX4A</b>	4 channel analogue transmitter
<b>HBRX4D</b>	4 channel digital receiver with force guided safety relays and contact monitoring
<b>HBTX2T</b>	2 channel temperature transmitter (line powered)
<b>HBR11</b>	Remote isolation indicator



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