# IE-GuardFlex

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## Distributed Hazard Monitor System


### APPLICATION

The IE-GuardFlex is the central control unit for 4B's Distributed Hazard Monitoring Solution (DHMS). Using industrial Ethernet technology, the IE-GuardFlex controller connects to, and monitors multiple machine mounted sensors via our class leading IE-Nodes. The complete IE-GuardFlex system can be configured to support multiple machines, IE-Nodes and sensors, and will interface directly to the machine MCC's to perform a controlled stop in the event of the detection of a hazardous condition.

### METHOD OF OPERATION

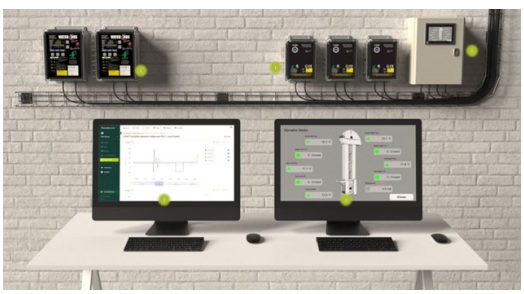
The IE-GuardFlex system is typically located within the plant MCC and dust hazard "safe area". Connection is then made, via industrial Ethernet (CAT6 cabling) to IE-Nodes distributed locally to the monitored machines in the "hazardous area". Typical machine types would be bucket elevators, enclosed conveyors, open conveyors, chain conveyors, roll stands, etc. The range of 4B hazard monitoring sensors are connected to the local IE-Nodes and monitor for hazardous conditions such as belt slip (SlipSwitch, Milli-Speed), belt misalignment (TouchSwitch, Bulldog), bearing temperature (ADB, Milli-Temp), Vibration (Milli-Vib), blocked chute (Binswitch), etc.

With all IE-Nodes and sensors connected, the plant engineer can start the node search process using the intuitive GUI on the 7" colour touchscreen display. Found nodes can then be configured, and attached sensors allocated to user configured machines.

The system allows for 3 stage ALARM / STOP configuration per sensor. Output relays can be assigned to ALARM and/or STOP conditions per sensor or per machine. In addition, the common ALARM and STOP output relays indicate if there is an alarm or stop condition present on any of the connected sensors.

### FEATURES

- Robust, IP66 Stainless Steel enclosure
- 7" Colour touchscreen display with intuitive GUI
- Supports multiple machine configuration with the following inputs
  - Run Signal (Input)
  - Assignable ALARM or STOP relay (Output)
- Common ALARM and STOP relay
- 3 x Configuration Options
  - X4 = 4 x Speed Monitoring, 1 Alarm, 1 Stop
  - X8 = 8 x Speed Monitoring, 1 Alarm, 1 Stop, 18 Relays
  - X16 = 16 x Speed Monitoring, 1 Alarm, 1 Stop, 36 Relays
- Can be configured for up to..
  - 100 Machines
  - 64 IE-Nodes
  - 1024 Devices
- Remote view and control over network
- Multi-user access control
- Active alarm and alarm history
- Change log



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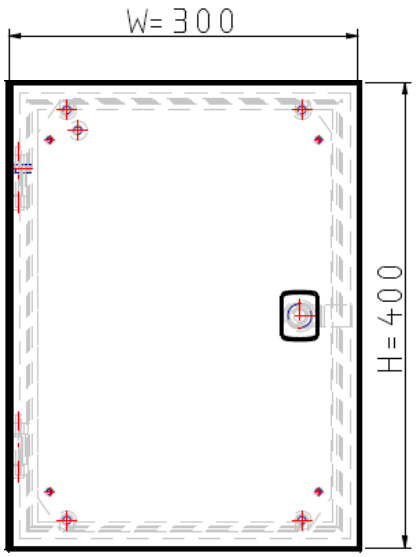
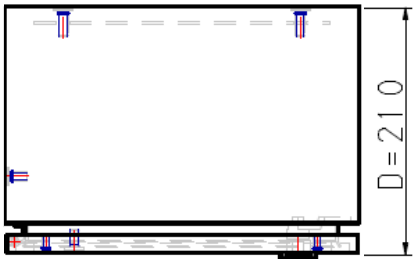
## DIMENSIONS




## TECHNICAL SPECIFICATIONS

| | |
|---|---|
| Power Supply | +24 VDC |
| Ethernet Port | 4 x RJ45 – for connection to IE-Node, IE-Switch, IE-Router |
| Inputs – Run Signals<br>Only required for machine speed monitoring | ETH-CONT1V4-**X4** = 4 x 24VDC run signal<br>ETH-CONT1V4-**X8** = 8 x 24VDC run signal<br>ETH-CONT1V4-**X16** = 16 x 24VDC run signal |
| Output – Relay<br>Assignable to sensor or machine ALARM or STOP condition | ETH-CONT1V4-**X4** = 0 – use common ALARM and STOP relay<br>ETH-CONT1V4-**X8** = 18 x Relay (2A at 30VDC)<br>ETH-CONT1V4-**X16** = 36 x Relay (2A at 30VDC) |
| Common Output – Relay<br>Fixed output for system ALARM and STOP condition | ETH-CONT1V4-**Xx** = 2 x Relay (5A at 20VDC) |
| Housing Material | Stainless Steel (304) |
| Dimensions | 300mm W x 400mm H x 210mm D |
| Approvals | CE, UKCA, UL |