



Sure to be safe

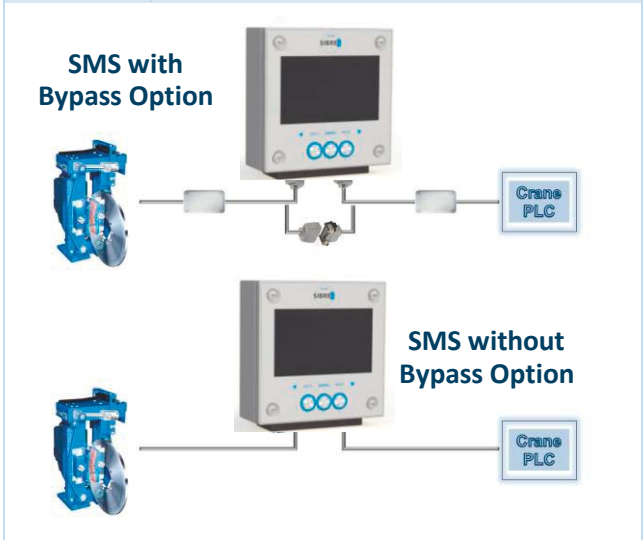
SMS
Status Monitoring System



In order to increase the operational safety and the availability of your machine, SIBRE is offering optional packages of monitoring features for disc brakes. The Status Monitoring System SMS is using monitoring switches, contacts, temperature sensors and DMS-technology to permanently read the actual status of the brake. These signals are made available in the PLC, enabling accurate planning of preventive brake maintenance. Thus, maintenance costs can be reduced and operational safety and availability are increased.

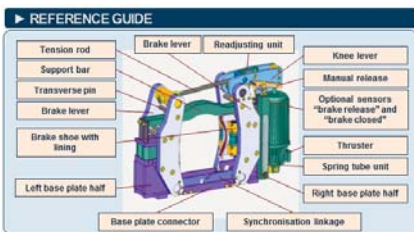
To accommodate the SMS to your specific needs, different versions are available:

| | |
|--------------------------|---|
| SMS 1.0 | <ul style="list-style-type: none"> - using brake mounted sensors for indication of "brake open", brake closed", "pad wear limit", "EMR engaged" and "thrustor stroke" as well as temperature sensors PT100 - sensor signals are centralized in a brake-mounted terminal box, and can easily be connected with PLC |
| SMS 1.1 | <ul style="list-style-type: none"> - as SMS 1.0, with additional load pin for reading the clamping force |
| BYPASS [OPTIONAL] | <ul style="list-style-type: none"> - Multipin connectors UL94 V0 - IP68 - 2xJunction boxes ABS 171x121x55 mm - 2x Multiconductor cables: Input: (max length to SMS) 3m Output: (max length from SMS) 1m |



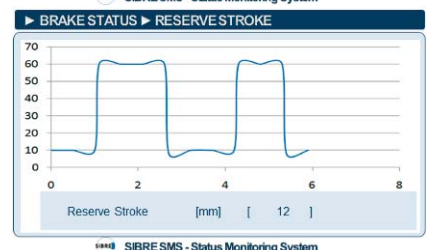
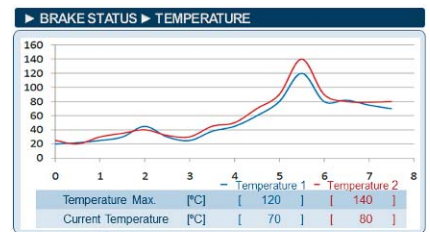
SPECIFICATIONS

| | |
|--------------------------|--|
| Wall Mounting Enclosure: | 30x25x15cm Mild steel 1,5mm - IP66, NEMA 4, 12 y 13 |
| Screen: | 152x91mm 800x480 pixels, 262,144 Colours (18 bit), 40 Page Display RAM, 128M Byte Flash, 4G+, LED Backlight Control, 5V Supply 3.3V Logic, ASCII + UNICODE Fonts |
| SUITABLE FOR | USB, TEXU, SHI |
| Sensor Number: | - 8 digital sensors 16 - 8 analogue sensors |
| Number of Pins: | SMS IN: 58 pin expandable up to 72 pin SMS OUT: 28 pin expandable up to 72 pin |
| Max. Current/Voltage: | 10A, 250V ca |
| Supply Voltage: | 24V dc |
| Temperature Range: | 0°C ... +70°C |
| Weight: | 5,5 Kg. |



BRAKE STATUS ► SYSTEM OVERVIEW

| | | |
|----------------|----------|---------|
| Brake Open | [Yes/No] | [NO] |
| Pad Wear | [Yes/No] | [NO] |
| Manual Lever | [On/Off] | [OFF] |
| Temperature 1 | [°C] | [80] |
| Temperature 2 | [°C] | [70] |
| Clamping Force | [kN] | [45] |
| Reserve Stroke | [mm] | [12] |



Alterations reserved

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Sure to be safe

SMART

SIBRE Monitoring, Analysis & Remote Technology





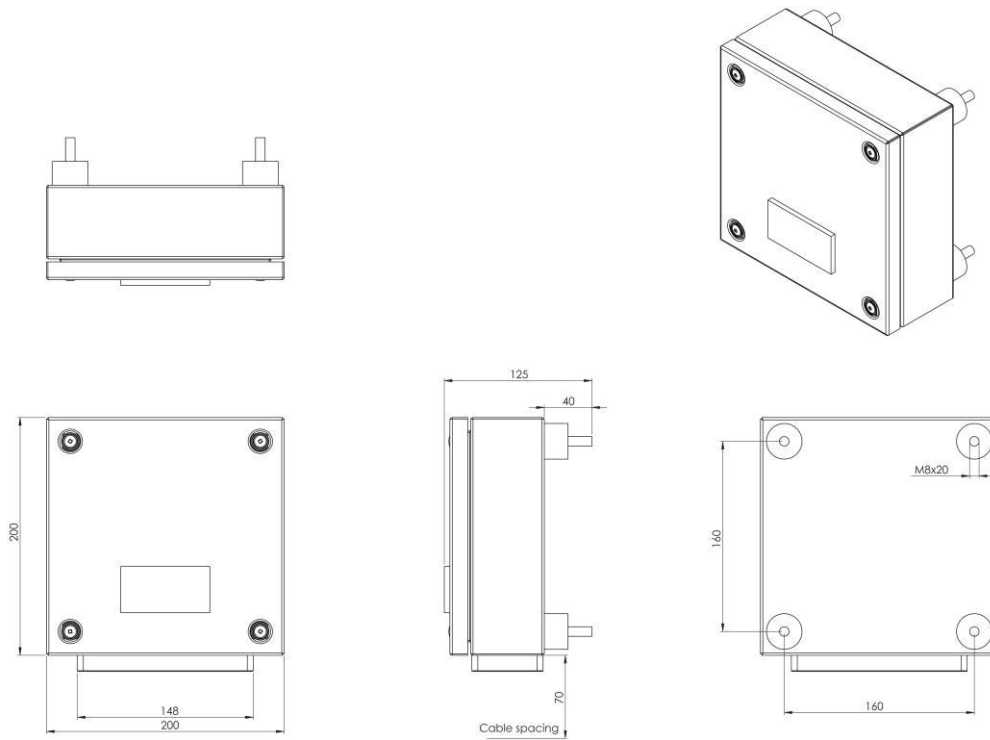
Product Features:

- Suitable for all brakes and HPU
- 20 x sensor inputs
- Inputs available as bypass for PLC
- Status display for inputs, power and troubleshooting
- Easy and fast screw pluggable terminal blocks
- Robust daisy chain SIBRE bus
- IP65 & marine painting enclosure

Product Specifications:

| | | | | |
|---------------------------|------------------------------|---|--|---|
| I/O Sensors | Inputs | 8 x digital (D1...D8) 8 x analog (A1...A8) 4 x RTD (T1...T4) | PNP & non-PNP, 3 wires 4 -20mA, 3 wires Pt100, 2 wires | Voltage range: 10...30VDC Voltage range: 10...30VDC Temperature range: 0...+800°C |
| | Outputs | 8 x digital, bypass D1...D8, including led status 8 x analog, bypass A1...A8, including led status 4 x analog, RTD transducer (T1..T4) to 4-20mA signal, including led status | | |
| Bus Communication | I/O | 1 x input & 1 x output Sibre bus, 3 wires | | |
| | Wiring scheme | Daisy Chain | | |
| | Distance | 1000 m max | | |
| Connection | I/O Sensors | Screw pluggable terminal blocks | 2,5mm ² solid / 1,5mm ² stranded wire | |
| | Power supply | Screw pluggable terminal blocks | 2,5mm ² solid / 1,5mm ² stranded wire | |
| | I/O SIBRE Bus | Screw pluggable terminal blocks | 2,5mm ² solid / 1,5mm ² stranded wire | |
| Cable Entry | I/O, bus & Power | Multi cable gland: 16 x 3-6 mm; 4 x 5-9 mm ; 2 x 8-12 mm | | |
| Power Manager | Power input | SDT: 24VDC 2A. Optional: 110-230VAC* (50/60Hz) 1.4A Digital sensors: 24VDC or 110-230VAC* (50/60Hz) Analog sensors: 24VDC or 110-230VAC* (50/60Hz) | | |
| | Protection | SDT and sensors protection with rearmable fuse ; Surge protector for sensors ; Over current and over voltage protected ; 4 led for troubleshooting ; Internal vibration sensor | | |
| Mechanical & Enviromental | Dimensions | 200 x 200 x 80 mm (W x L x H) | | |
| | Weight | 2,5Kg | | |
| | Painting | Marine paiting 160µm min. RAL 7035 structure powder coating (stainless optional) | | |
| | Operation Temperature | -10...+70°C / 14...158°F | | |
| | Operation Humidity | 95% RH | | |
| Certification | IP proof | IP65 | | |
| | CE EMC | EN 61000-6-2 (2005) / AC (2005) + EN 61000-6-4 (2007) / A1 (2011) | | |
| | CE Safety | EN 60204-32: 2008, RoHS 2011/65/UE | | |
| Optional | AC Power Supply* | 230VAC to 24VDC power supply to power SDT at 110VAC...230VAC 230VAC to 24VDC power supply to power analog sensors at 110VAC...230VAC | | |
| | Enclosure | Stainless / Painted stainless | | |

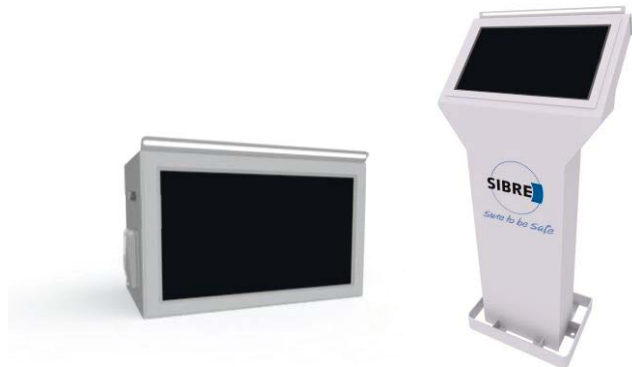
Dimensional drawing:





Product Features:

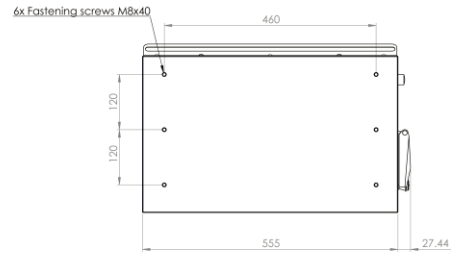
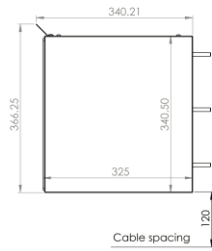
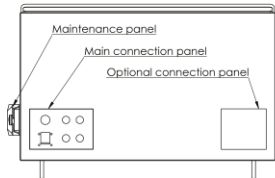
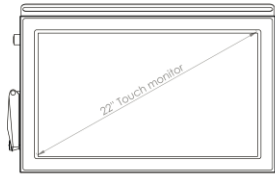
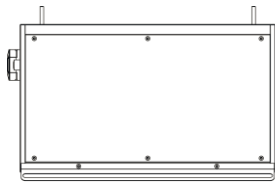
- Multi-touch monitor¹ with SMART platform embedded
- Wi-Fi 802.11b/g/n hotspot
- Industrial PC with Linux embedded
- Ethernet, Profibus and wireless 3G² interface
- SIBRE bus interfaces (up to 4) for SDT
- IP55 & marine painting enclosure



Product Specifications:

| | | |
|---------------------------|----------------------------------|--|
| System Specification | Display | LCD multitouch; 16:9 format ; 1920x1080 resolution |
| | Processor | Intel i3 or higher |
| | Operative System | Linux based |
| | Storage | 128GB SSD or higher |
| Interfaces | Profibus | Profibus DP (optional) |
| | Ethernet | 10-100-1000Base-T |
| | Wireless | 3G or 4G (optional) |
| Connection | WiFi | Wi-Fi hotspot (802.11 a/b/g) (802.11n: 2.4 GHz) |
| | Profibus | DB9 connector |
| | Ethernet | RJ45 |
| Power Manager | Power Supply | Terminal box with 3 poles with cable gland M16 (0,75 - 1,5 mm ² range) |
| | Power input | 230Vac (110Vac optional) |
| Mechanical & Enviromental | Power Consumption | 225W aprox. (under full loading) |
| | Dimensions | 555 x 325 x 367 mm (W x L x H) |
| | Weight | 20 kg |
| | Mounting | Wall-fixed. 6xM8x40mm screw |
| | Painting | Marine painting 160u. RAL 7035 structure powder coating. |
| | Operation Temperature | 0°C to 40°C / 32°F to 104°F |
| Optional | Operation Humidity | 20%-80% RH |
| | IP proof | IP55 |
| | Version¹ | SMT-R: Rack version SMT-S: Stand version |
| | Communication² | 3G/4G wireless communication Profibus DP Second profibus interface for SIBRE SLP or other device |

Enclosure dimensional drawing:



Stand dimensional drawing:

