

SM-200 Handheld Reader

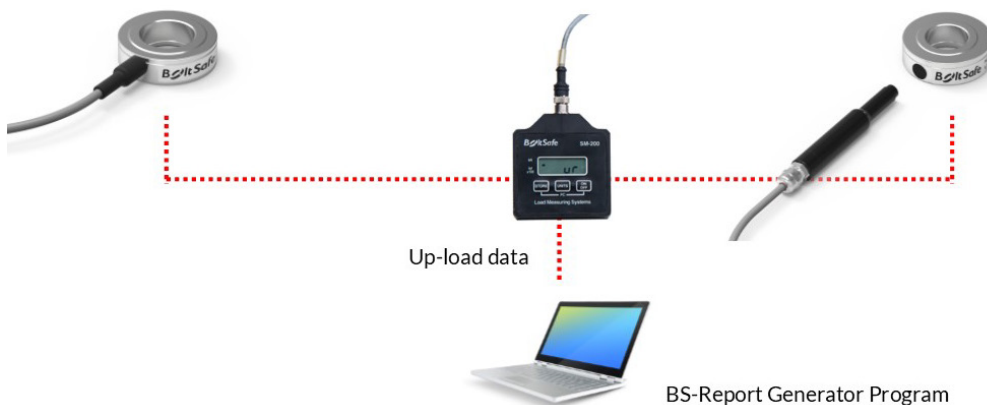
The SM-200 Handheld reader is a handheld instrument that can read and store data from both the CMS (Continuous Monitoring System) and PMS (Periodic Monitoring System) BoltSafe sensors. Reading the PMS sensor requires a probe.

The SM-200 can be used for direct readout during the initial setting of the residual bolt load in the bolted joint, as well as for subsequent checks. The instrument will read and display the bolt load data from each sensor on its LCD display. It is possible to choose between readings in kN or in lbf.

The unit will switch off automatically after 1 minute when no sensor is connected. By pressing a button, the sensor data is stored in the instrument. This can later be uploaded to the “BS-Report Generator” program on a PC, and reports can also be printed. This software is sold separately.

Usage of the Handheld Reader

- The CMS sensor has a connector which connects directly to the SM-200. The instrument then shows the value of the connected sensor on the display.
- The BoltSafe PMS probe is needed for reading BoltSafe PMS sensors. This probe energizes the BoltSafe sensor and reads back all data by means of a non-contacting interface. The probe is connected to the SM-200 with a connector.
- The sensor data is uploaded to a PC by connecting the SM-200 to the PC's USB port and transferring the sensor data to the PC. The “BS-Report Generator” program presents the data for analysis. (Cables and software are available separately.)



Instructions for use

On/off

Press the "ON/OFF" button. The unit will switch off automatically after 1 minute if a sensor is not connected.

'ur'

If you connect a sensor, but no - or less than 10% - load is applied, the reader will show 'ur'. This means 'under load' and indicates that there is a connection with the sensor, but at less than 10% of its maximum. Apply more load and values will appear.

Toggle units

Press the "UNITS" button to toggle between readings in "kN" or in "lbf".

Store the read value

Press the "STORE" button while the sensor value is shown on the display. Up to 256 readings can be stored in the instrument. Only the last reading on each sensor is stored, i.e. one reading per sensor and no history of readings.

Upload the stored values to a PC

This function requires the BS-Report Generator program to be installed on the PC. The sensor data is uploaded to the PC by connecting the SM-200 to the PC's USB port. Press the "STORE" and "ON/OFF" buttons simultaneously to put the SM- 200 into the "r232" mode. Start the "BS-Report Generator" program and click the "SM- 200" button. Follow the instructions on the screen, and the sensor data is transferred to the PC.

Clear the memory

By pressing "UNITS" and "ON/OFF" simultaneously, the display will show "clear". To clear the memory, press the "STORE" button.

Reading PMS sensors

The BoltSafe PMS probe is needed for reading BoltSafe PMS sensors. This probe energizes the BoltSafe sensor and reads back all data by means of a non-contacting interface. The probe is connected to the SM-200 with a connector.

Change battery

To change the battery, open the rear lid using a screwdriver (4 screws). The battery is a 9V Alkaline (6LR61).

