

# SPORTident Station BSM7-USB and BSM7-RS232



The stations of the BS7 series are discontinued. Use the stations of series BS8 instead.

## Description

- The SPORTident Base Station Main 7 USB and SPORTident Base Station Main 7 RS232 are compatible with the existing SPORTident system parts and can be used mixed with older equipment. The stations are available with a USB cable or with a serial RS232 interface.



- The BSM7-USB is powered by the USB port. In addition an internal backup battery keeps the real time clock working and enables data retention of the station's backup memory. The backup battery does not guarantee the complete functionality of the BSM7-USB station when being unplugged from the USB port. Because the station is fully powered by the USB port there is no stand-by period. The station is always in Active Mode when connected to the USB port. Turn off into Stand-by Mode is affected automatically when the station is removed from the USB port. Earlier turn off by using the Service/OFF-Card is possible but does not effect in a significant longer life time of the stations backup battery.
- The BSM7-RS232 station is "always on" and works in a low power Stand-by Mode. There is no need to switch on the station or to make any special preparations before the unit can be used. Also in Stand-by Mode the station is ready to process SPORTident-Cards. The maximal wake up time is 1 second. The station is switched from Stand-by Mode to Active Mode when the first SI-Card is inserted or with the first instruction sent from the PC by using the serial interface. That's why the BSM7 station can work with the shortest possible Active Mode period of 2 minutes. Once the station is in Active Mode the reaction time to the insertion of subsequent SI-Cards is very quick. After an adjustable period without a SI-Card being inserted, the station drops back to Stand-by Mode.
- Both stations BSM7 have a higher transmission speed of 38400 baud. This transmission speed automatically is selected each time the station is plugged into the USB port. For compatibility reasons the stations can be switched into a lower transmission speed of 4800 baud. The higher transmission speed results in a significant faster SI-Card readout process.
- The BSM7 stations feature with an on-board service display visible from the back side. The display shows quickly main station's settings like real time and code number. Each SI-Card

number is displayed for 3 seconds after punching.



- Using the Service/OFF-Card the stations can also be switched to Service Mode. In Service Mode the station's LCD display offers additional information like serial number and firmware version. Information about station's battery is given both by measuring the battery voltage and by computing the station's battery consumption in relation to the battery performance. Service Mode is automatically terminated after 5 minutes or earlier if the Service/OFF-Card is used.
- The station's real time clock system is calibrated and temperature compensated (starting with firmware V5.53). This offers higher accuracy also at very high and very low temperatures. The internal time resolution is 1/256 s, approximately 4 ms.
- The SPORTident Stations BSM7-USB and BSM7-RS232 feature with a very low power consumption. In typical application cycles a battery will serve for several years. This enables the use of a smaller battery. The battery is soldered to the printed circuit board and this enables the SPORTident GmbH to guarantee and control a fully certified disposal of empty batteries. For the first time a non-polluting lithium battery is used. This battery type does neither contain Cadmium nor Mercury.

## Handling and service

- The BSM7 stations only need minimal service. In typical application cycles only the station's real time has to be monitored.
- Station's settings can be changed by using PC-software SI-Config+. In the inductive coupling process between a SPORTident master station and a slaved station a coupling stick should be used to improve data transmission.
- To achieve highest synchronism in the station's real time clock it is recommended to adjust station's real time by using the SPORTident Station BS8 SI-Master (coupling stick needed).
- The battery has a capacity of 2000 mAh. This value should not be changed in the setups.
- The Stations BSM7-USB and BSM7-RS232 feature with an easy firmware upgrade mechanism. Station's firmware can be uploaded by the user directly from the PC. This feature keeps the station up to date and enables the implementation of additional functionality. Information about firmware versions and features are available at [www.sportident.com](http://www.sportident.com).



## Specifications

Internal power supply	1 x Lithium AA cell, no rechargeable
Battery capacity	2000 mAh
Durability	4 - 7 years
Battery exchange	by SPORTident GmbH and authorized SPORTident partners
Operating range	- 20°C to + 50°C
International protection class	IP 64 (DIN EN 60529) No protection against water
Dimensions	115 mm x 62 mm x 32 mm
Weight	210 g
Accuracy at normal temperature	less than +/- 20 seconds a month
Switch on time	< 1 second (standard)
Backup memory	maximum number of punches: 21802 maximum number of SI-Cards data records: 1022