

- Lightweight, portable and completely weatherproof
- Easy to set up and use with convenient Quick Start
- Easy integration into SCADA systems via the Ammonit Meteo-40 data logger



Description

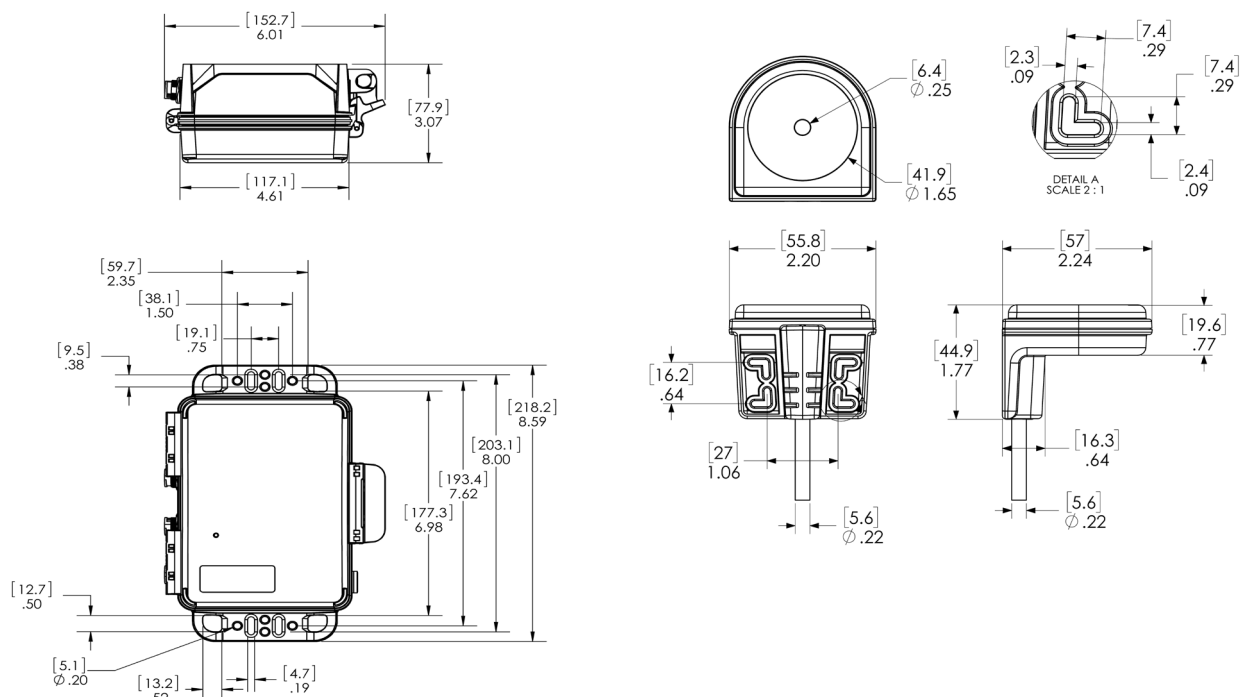
The SM4BAT is a weatherproof, programmable audio recorder designed for the periodic, seasonal, and long-term monitoring of wildlife bioacoustics in almost any environmental condition. You can schedule daily recordings to meet a variety of needs including times that are relative to sunrise and sunset, specific duty cycles with on/off recording patterns, and continuous monitoring all day and all night.

The SM4BAT optimizes battery life and memory capacity to record for extended periods of time. Using both memory slots and new alkaline batteries, a typical deployment can record for up to 650 hours spanning several months.

Made of rugged polycarbonate, the SM4BAT is less than half the weight and size of the SM3BAT. The integrated mounting bracket and weatherproof security cover keep the unit safe and dry in the most punishing environments.

To get you started quickly, the SM4BAT features a brand new, easy-to-use, Quick Start menu and Scheduler. Use built-in schedules, or customize them for your specific recording needs.

Dimensional drawing



SM4BAT and Ammonit Meteo-40 data loggers

By connecting the SM4BAT FS with an Ammonit Meteo-40 data logger, you can conveniently monitor the bat activity in the surrounding.

A **bat pass** refers to a series of pulses recorded as a bat flies by the microphone. In general, a bat pass begins with the first detected pulse and ends with the last detected pulse either when no further pulse have been detected after a defined maximum time or when the maximum trigger duration has been reached. A counted bat pass must contain at least two pulses. This way, SM4BAT counts passes and pulses, which have been detected on an ongoing basis, and reports number of counts to the Meteo-40.

Additionally, Meteo-40 records the percentage of used memory on the flash card(s) inserted in the SM4BAT, as well as internal temperature and voltage of SM4BAT.

Meteo-40 is compatible with most of the available SCADA systems. Thus you can integrate the SM4BAT into your live monitoring and bat activity can be sent to the wind farm operation center via the Meteo-40 data logger.

Specifications

Characteristic	Description
Recording Channels	2
Recording Technologies	16-bit PCM .wav
Audio	
Amplifier Gain	Preamp: 0 dB or 26 dB, Amplifier: 0 dB ... 59.5 dB in 0.5 dB steps
Noise Floor	-93 dBV, A-Weighted (@0 dB gain, HPF disabled)
High Pass Filter	220 Hz or 1 kHz
Sample Rates [kHz]	8, 12, 16, 22, 05, 24, 32, 44.1, 48, 96
Microphone, internal	Sensitivity: -35 ±4 dB (0 dB=1V/pa@1kHz)
Microphone, external (SMM-A2)	Sensitivity: -9 ±4 dB (0 dB=1V/pa@1kHz)
Accessories	
Memory	Class 4 or faster SDHC and SDXC (no reformat required), up to 32 GB SDHC or up to 512 GB SDXC per slot
Adapter	Adapter RS232 to RS485
Supply	
Power Supply	External: 5 – 17 VDC Internal: 4 standard D size disposable alkaline batteries Clock Backup Bat.: 3.0 VDC lithium CR2032
Power Consumption	Recording: 100 – 180 mW, Sleeping: 1.8 mW
Operating Temperature	-20 °C to 85 °C
Dimension/Weight	218 mm x 152 mm x 78 mm (L x W x H), Weight with 4 D batteries: 1.3 kg
Manufacturer	Wildlife Acoustics, Inc.

Connection between SM4BAT, Meteo-40 and external supply

Meteo-40 Data Logger

