MSR Power Pack
Quick guide

The MSR Power Pack is an autonomous charging station that can be used to recharge the internal battery of the MSR data logger during operation. Thanks to a capacity of 5000 mAh and an adjustable charging interval of one day, one week or one month, the unit is able to realise much longer measuring tasks. For instance, an MSR165 data logger is capable of realising measuring tasks that are up to 6 times longer.

Scope of delivery:

• 1 x MSR Power Pack 5000 mAh
• 1 x mains adapter
• 1 x EU mains plug
• 1 x USA mains plug
• 1 x UK mains plug

For more information, visit
www.cik-solutions.com
or contact us at
info@cik-solutions.com

1 Start-up

- Use the selection switch on the MSR Power Pack to select the desired standby period between the charging processes of the data logger (1 day, 1 week or 1 month).

- Configure and start your MSR data logger.

- Now connect the USB cable of the data logger with the MSR Power Pack.

- The MSR Power Pack then checks whether the data logger needs to be recharged and, if so, charges the unit. **Please note:** The charging process is only started if the power requirement of the data logger is large enough.

  The LED on the MSR Power Pack flashes as outlined below while the data logger is being charged:
  2 x every 5 seconds: Charge current > 70 mA
  1 x every 5 seconds: Charge current > 25 mA

- If the data logger is fully charged, the MSR Power Pack goes into standby until the period selected in step 1 has expired. Subsequently, the data logger is charged again. **Please note:** If the selection switch is used whilst the MSR Power Pack is in standby, then the newly selected period will only take effect in the subsequent standby period. Therefore, a standby period that has already started cannot be shortened or extended.

2 Charging the MSR Power Pack

- To charge the MSR Power Pack, connect it to the mains using the supplied mains adapter. The yellow LED flashes once to indicate that the mains adapter has been connected.

- The amber LED will light up during the entire charging process. **Please note:** If during the charging process of the MSR Power Pack a data logger is connected to the USB connection of the MSR Power Pack in order to be charged, then the LED additionally flashes to indicate that the data logger is charging (see item 1 "Start-up").

- The MSR Power Pack is fully charged as soon as the amber LED goes out. A complete charging process takes approximately 10 hours.

! Error indication

- If the MSR Power Pack repeatedly flashes quickly, this indicates that an error has been detected. In doing so, all processes are halted until the error has been rectified.

- Possible error causes:
  A) Too much power has been drawn via the USB connection (> 150 mA).
  B) Error of the internal charging circuit.

- Rectification of the error:
  1. Disconnect the MSR Power Pack from the mains adapter and from the USB cable.
  2. Reconnect the MSR Power Pack to the mains using the supplied mains adapter. The MSR Power Pack should now work properly again.