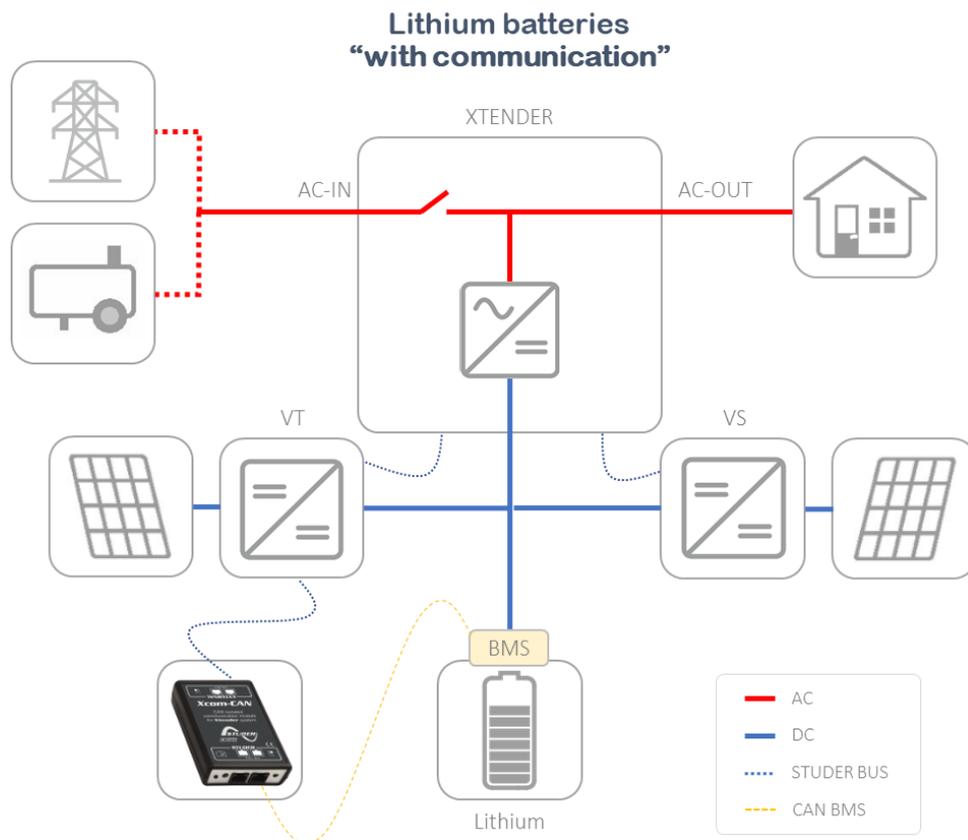# FAQ – Can I use lithium batteries with Studer devices?

There is a wide range of battery technologies available for energy storage applications. Studer devices are compatible with all battery types, including lithium batteries. While with the other battery types, adapting the configuration of the battery management cycle to the battery specifications is enough, with lithium batteries the communication plays a key role. Lithium batteries differentiate from other batteries by having an integrated Battery Management System (BMS).

There are two types of Lithium batteries:

1) Lithium batteries with communication

Most lithium batteries require communication between their BMS and the rest of the system for an optimal management of the battery (safety and lifetime). Every battery has its own specific protocol to communicate. The Xcom-CAN works as a bridge between the BMS and the Studer bus. It has several protocols implemented for Lithium battery management, which are compatible with a list of specific batteries. Please check our website for an updated list of compatible manufacturers.

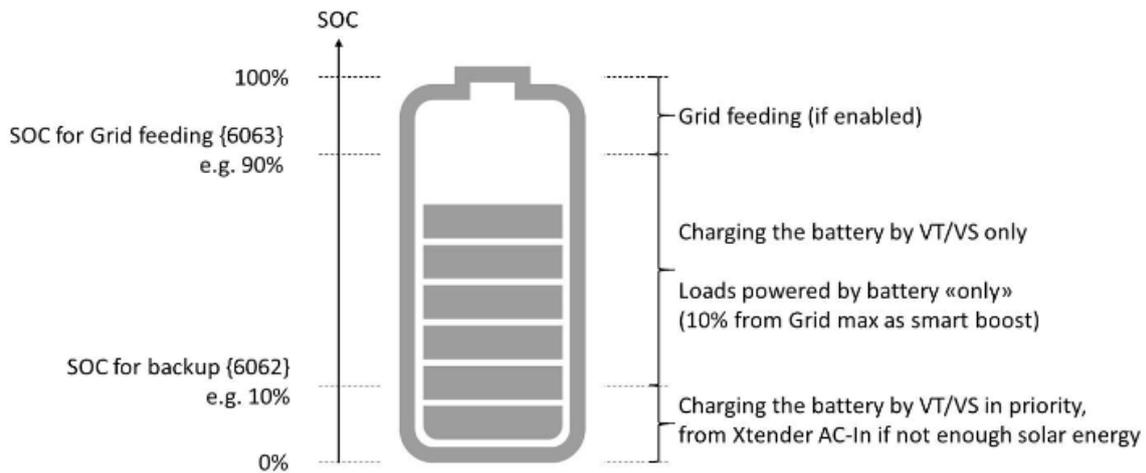Lithium batteries
"with communication"

When connected to an Xcom-CAN, the BMS takes over the control of the battery management, which is no longer available in the Xtender, Variotrack or Variostrings settings menu. The battery management information is sent from the BMS to the Xcom-CAN, which will steer the Studer devices adjusting their configuration accordingly.

FAQ – Can I use lithium batteries with Studer devices?

Having a communicating BMS makes the system smart, enabling us to facilitate the configuration of the main functionalities of the system with a list of parameters unique for lithium batteries.
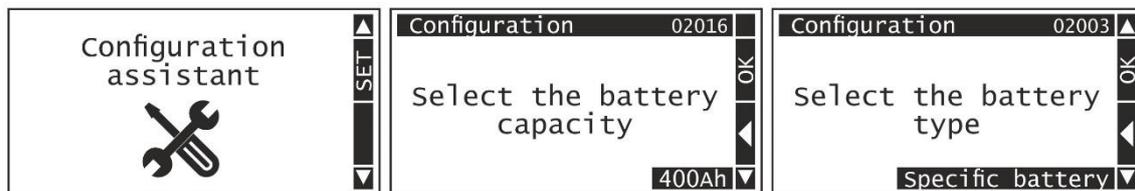
The configuration of an Xtender system with lithium batteries and an Xcom-CAN can be easily done using the following parameters: SOC for backup {6062} and SOC for grid feeding {6063}

For further information on how to configure an Xtender system with Lithium batteries, please see our Xcom-CAN manual (Accessories user manuals).

2) Lithium batteries without communication

Some lithium batteries with an integrated BMS do not need communication. These batteries will require a configuration of the battery management cycle as requested by the battery manufacturer. Our configuration assistant can guide you through this configuration. Selecting Lithium as battery type and choosing the right capacity is usually enough.

Please confirm with the battery manufacturer that these settings are suitable for your lithium battery. The battery management settings can be adjusted according to battery manufacturer specifications in the Xtender settings menu on your RCC.