2.7.1 Backup Battery

The backup battery maintains the program and data when the S5-115U is switched off. The backup battery has a service life of approximately two years.
After a lengthy storage period lithium batteries develop a passivation coating which is responsible for the "voltage delay effect" (when the battery is loaded, the voltage drops temporarily to under 3 V).
Before using a lithium battery in the power supply module, you should depassivate the battery by loading it for two hours with 100 ohms.

> **Note**
>
> The safety regulations for hazardous materials must be observed when transporting lithium batteries!

2.7.2 Memory Submodules

There are three types of memory submodules with different memory capacities available for the S5-115U:

Table 2-8. Available Memory Submodules

Memory Submodule		Cable Used in CPU				Order Number	Program No.	Organization
Type	Capacity*	941	942	943	944			
EPROM	8 Kbytes	▒	▒	▒	▒	6ES5 375-1LA15	11	byte
EPROM	16 Kbytes	▒	▒	▒	▒	6ES5 375-1LA21	12	byte
EPROM	32 Kbytes		▒	▒	▒	6ES5 375-1LA41	17	byte
EPROM	64 Kbytes**			▒	▒	6ES5 375-1LA61	122	byte
EPROM	128 Kbytes***				▒	6ES5 375-1LA71	124/163	word
EEPROM	8 Kbytes	▒	▒	▒	▒	6ES5 375-0LC31	211	byte
EEPROM	16 Kbytes	▒	▒	▒	▒	6ES5 375-0LC41	212	byte
RAM****	8 Kbytes	▒	▒			6ES5 375-0LD11	---	byte
RAM****	16 Kbytes	▒	▒			6ES5 375-0LD21	---	byte
RAM****	32 Kbytes		▒			6ES5 375-0LD31	---	byte

* 2 Kbyte corresponds to approximately 1000 STEP 5 statements

** Only 48 Kbytes can be used

*** Only 96 Kbytes can be used

** ** It is no longer necessary to use RAM submodules in the CPU 943 and CPU 944 since these CPUs provide the entire memory capacity in the form of internal RAM.