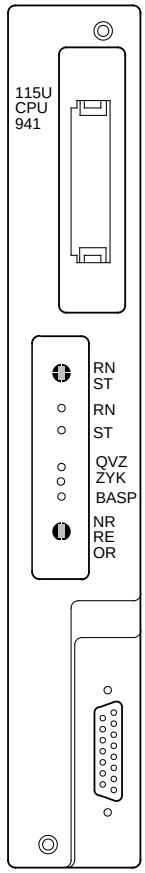
15.2.3 Central Processing Units

Central Processing Unit CPU 941 **(6ES5 941-7UB11)**



Technical Specifications

Memory capacity (total)	**maximum**	**9216 statements[1]**
- internal memory	**maximum**	**1024 statements[1]**
- memory submodule (RAM)	**maximum**	**8192 statements[1]**
- memory submodule (EPROM)	**maximum**	**8192 statements[1]**
- memory submodule (EEPROM)	**maximum**	**8192 statements[1]**
Execution time		
- per binary operation	**approx.**	**2.2 µsec.**
- per word operation	**approx.**	**60 to 200 µsec.**
Scan time monitoring	**approx.**	**500 msec. (can be modified)**
Flags		**2048; optionally half or all retentive [2]**
Timers		
- number		**128; optionally half or all retentive [2]**
- range		**0.01 to 9990 sec.**
Counters		
- number		**128; optionally half or all retentive [2]**
- range		**0 to 999 (up, down)**
Digital inputs		
Digital outputs - total	**maximum**	**2048**
Analog inputs		
Analog outputs - total	**maximum**	**128**
Organization blocks	**maximum**	**256**
Program blocks	**maximum**	**256**
Function blocks	**maximum**	**256 (can be assigned parameters)**
Sequence blocks	**maximum**	**256**
Data blocks	**maximum**	**254**
Operations set	**approx.**	**170 operations**
Required backup current from the backup battery at power off		
- internal RAM	**approx.**	**100 µA**
- RAM submodule	**approx.**	**200 µA**
Current consumption		
- from 5 V (internal)		**0.16 A**
- from 24 V		
(without programmer)		**0.04 A**
(with programmer)		**0.06 A**
Power losses of the module	**typically**	**2 W**
- with programmer	**typically**	**2.5 W**
Weight	**approx.**	**0.8 kg (1.76 lb.)**

[1] A statement usually takes up two bytes in the program memory.
[2] Use back-up battery for retentive feature.