With the distributed configuration, a distinction is made between parallel and serial communication. The main features of these types of communication are as follows:

- Parallel — Fast data transmission line length of up to 600 m
- Serial — Slower data transmission line length of up to 3000 m

2.2.1 Installing a PLC with Centralized Configuration

The following table shows which interface modules and connecting cables can be used for connecting the various expansion units to the CC in a centralized configuration.

Interface Module in the CC	Expansion Unit	Interface Module in the EU	Connecting Cable Max. Distance
IM 300-3 6ES5 300-3AB11	EU 183U EU 185U (I/O mod. only)	IM 312-3 [2] 6ES5 312-3AB11	fixed to the IM 312 module 0.5 m; 0.95 m
IM 301-3 [1] 6ES5 301-3AB13	EU 183U EU 185U (I/O mod. only)	IM 312-3 [2] 6ES5 312-3AB31	fixed to the IM 312 module 0.5 m; 0.95 m
IM 300-5 6ES5 300-5CA11	EU 184U EU 187U	IM 312-5 6ES5 312-5CA11	fixed to the IM 312 module 0.5 m; 1.5 m
IM 301-5 [1] 6ES5 301-5CA12	EU 184U EU 187U	IM 312-5 6ES5 312-5CA21	fixed to the IM 312 module 0.5 m; 1.5 m
IM 300-5 6ES5 300-5LB11	ER 701-1	IM 306 6ES5 306-7LA11	6ES5 705-0xxxx 0.5 m to 2,5 m

[1] This IM has a second interface for distributed communication.

[2] The last IM 312-3 always requires a 6ES5 760-0AB11 terminator.

To install a PLC in a centralized configuration, you must observe the following conditions:

- A centralized configuration is generally only suitable for connecting I/O modules (DI, DO, AI, AO) and some intelligent I/O modules (IPs) in the EU (see the Configuring Aids in the catalog and Chapter 4).

- The line length between the IM in the CC and the last IM in the EU must not exceed 2 m.

2.3 Examples

Given in the following are some examples of centralized and distributed configuration of various SIMATIC S5 components.

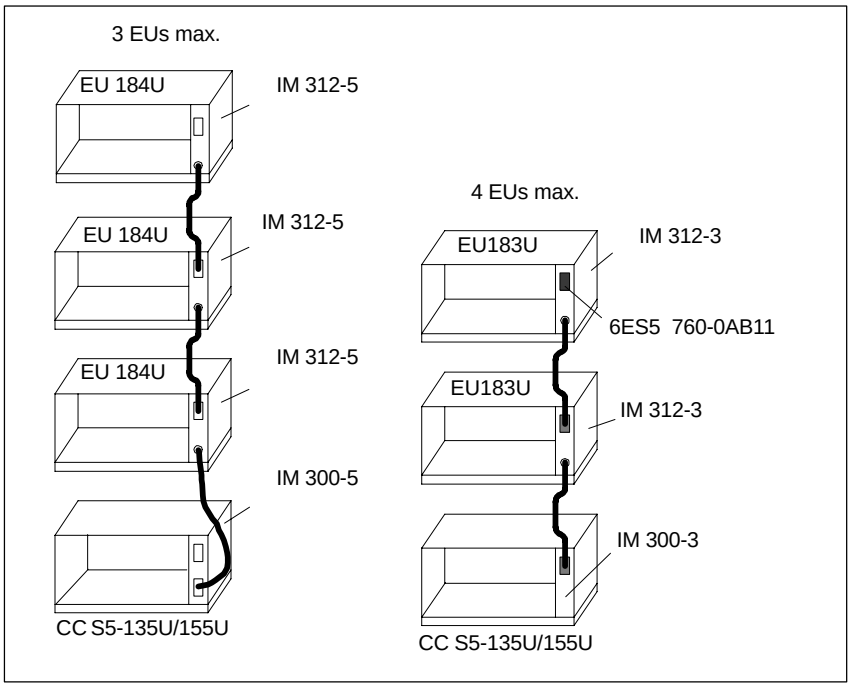


Figure 2-2 Centralized Configuration of an S5-135U/155U with the IM 300 and IM 312

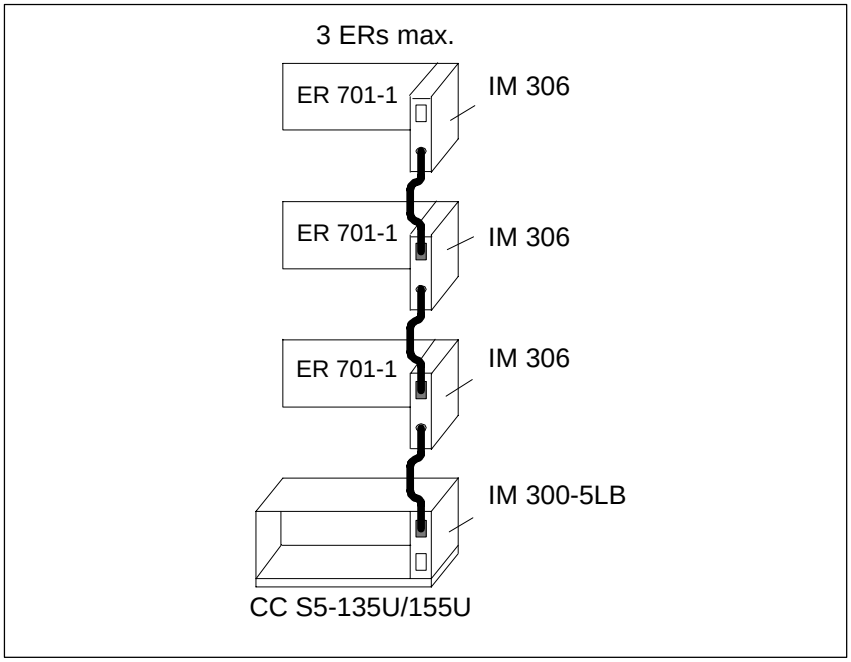


Figure 2-3 Centralized Configuration of an S5-135U/155U with ER 701s

4.2.1 Technical Description of the Expansion Units

The design of the EUs is comparable to that of the CC: they comprise a compact housing with a type-dependant number of slots for modules and, according to the type of EU, a cable duct, an integral power supply unit or fan subassembly.

The mounting dimensions of the EU 183U, EU 184U and EU 185U are the same as those of the 135U/155U CC (see Figs. 4-3 and 4-4). The EU 187U has neither power supply unit nor cable duct. Its overall height and depth are therefore different from those mounting dimensions of the other EUs.

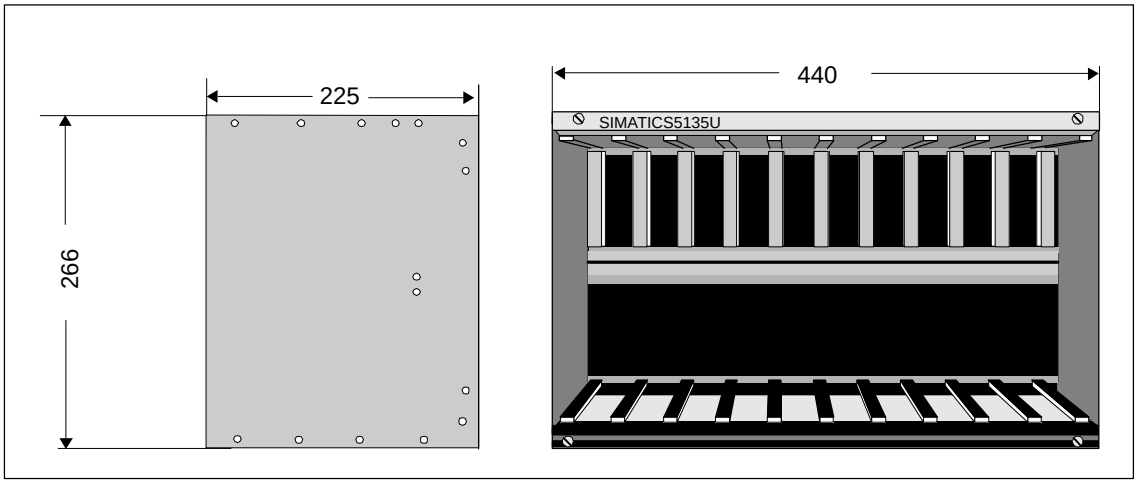


Figure 4-6 Mounting Dimensions of the EU 187U

Modules and Slot Assignments of the Expansion Units

The following tables show which modules can be inserted at which slots.

Modules and slot assignments of the EU 183U

Slot No. / Module type	3	11	19	27	35	43	51	59	67	75	83	91	99	107	115	123	131	139	147	155	163
IM 300																					■
IM 310, IM 314, IM 318	■																				
IM 317	■																		■		
IM 312-3																					■
DI, DQ, AI, AQ	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	
Signal pre-processing modules (IPs)	See current Catalog ST 54.1 for slot numbers																				
Monitoring module 313	■																				■