

5.11.2 PG Submodule

By means of the PG submodule, you can use the second interface of the CPU as an equally privileged PG interface.

Application

The PG submodule can be inserted in the following CPUs:

Interface Submodule	For Use With
PG submodule	CPU 928B CPU 948

Circuitry

The PG submodule is equipped with a transmitter and a receiver for 20 mA current loop signals. The loop current is always fed in from the PG. The following figure shows the circuitry for current loop signals of the standard cable:

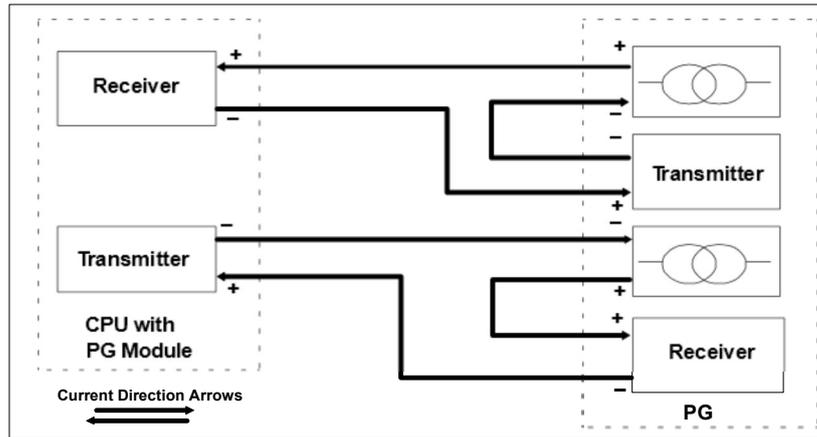


Figure 5-11 PG Submodule: Loop Current Direction

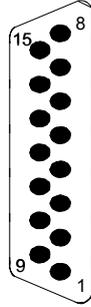
Data Transmission Rate

The rate for data transmission via the PG interface is always 9600 bps.

**Pin Assignments
of the PG
Submodule**

Given in the following table are the pin assignments of the 15-pin subminiature D-type connector in the front plate of the PG submodule:

Pin	Designation	Current Direction	Remarks
1	Housing/GND/GND _{ext}		
2	- RxD	→	
3	VPG + 5 V ₋		
4	+ 24 V from bus		
5	0 V GND/GND _{int}		
6	+ TxD	←	
7	- TxD	→	
8	Housing/GND/GND _{ext}		
9	+ RxD	←	
10	24 V GND	←	Current return
11	20 mA	→	Current source, transmitter
12	GND/GND _{int}		
13	20 mA	→	Current source, receiver
14	VPG + 5 V ₋		
15	0 V GND/GND _{int}		



←: From partner to CPU
 →: From CPU to partner

**Jumper Settings
on the
PG Submodule**

When the PG submodule is delivered, the jumpers are set as shown in the following figure. As a rule, therefore, you can use the PG submodule immediately.

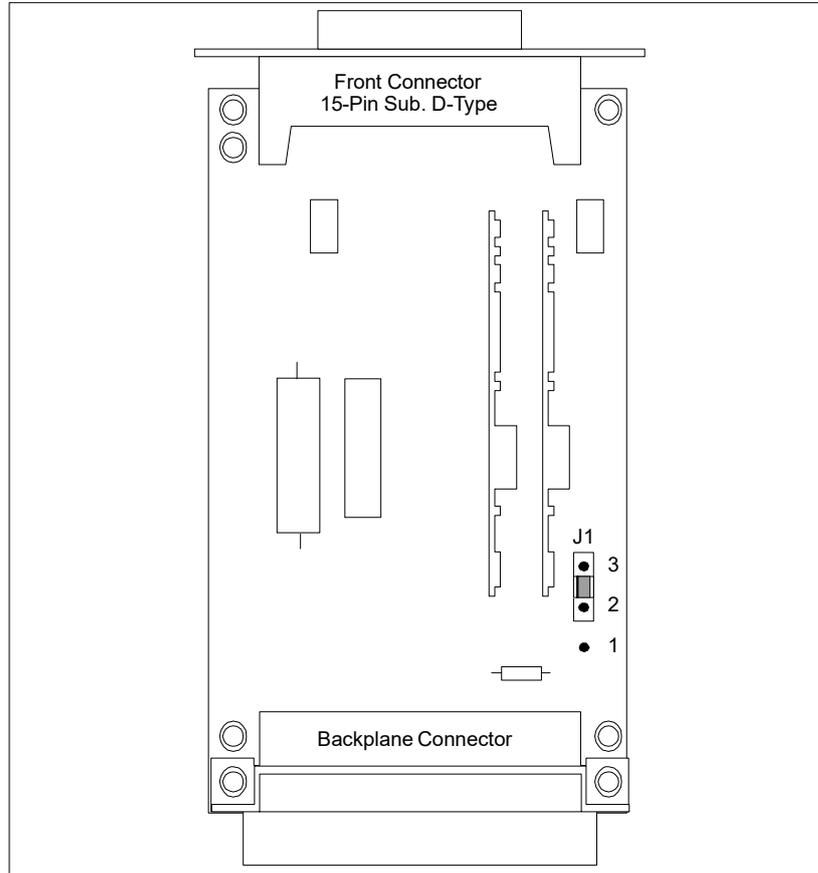
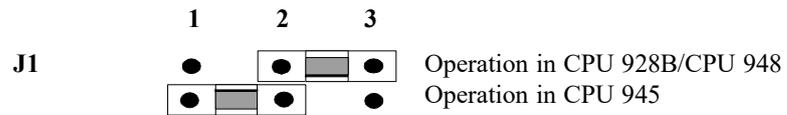


Figure 5-12 PG Submodule: Jumper Settings when Delivered

J1 is set to select whether the PG submodule is to be operated in the CPU 928B/CPU 948 or in the CPU 945:



**Standard
Connecting Cable
for the
PB Submodule**

Standard cables for connecting the PG submodule in the CPU to the PG are available from Siemens in various lengths, up to 1000 m.

Order numbers and lengths can be found in the ordering information.

Connecting cable: CPU - PG

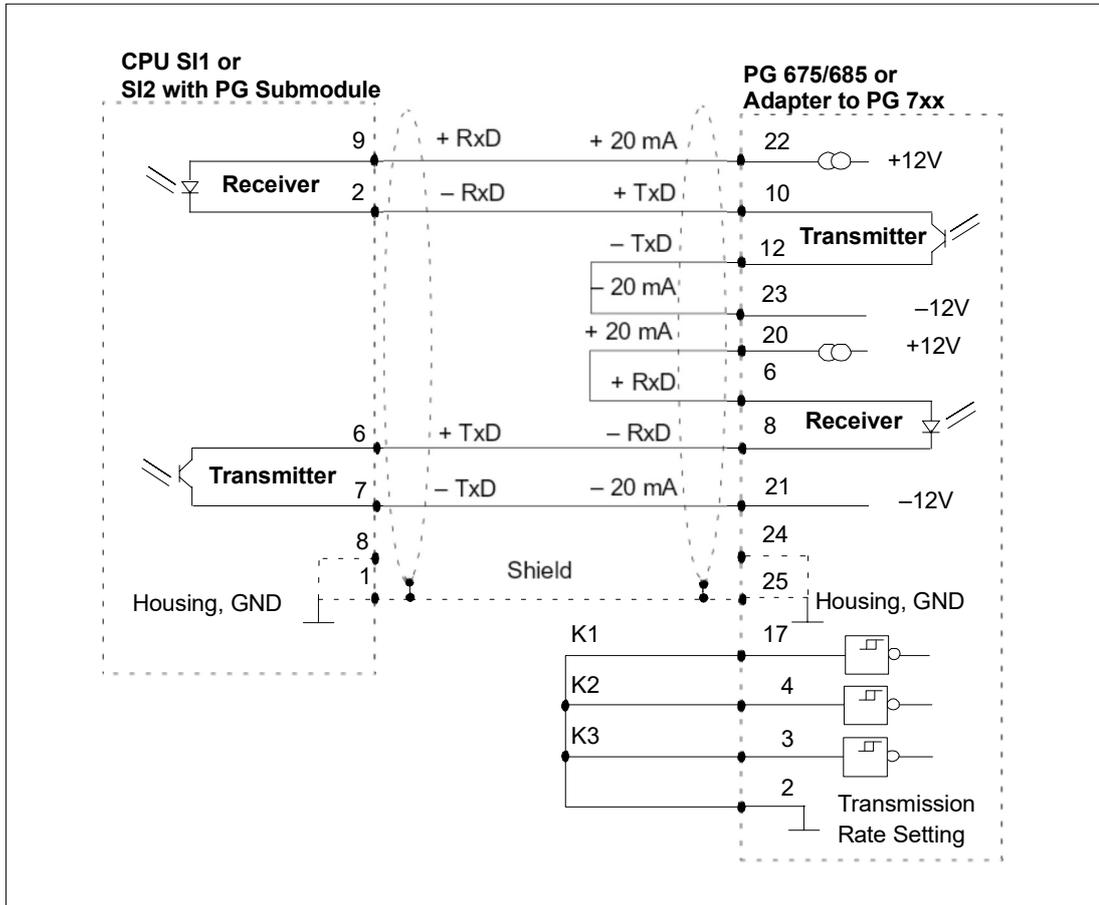


Figure 5-13 PG Submodule: Standard Connecting Cable