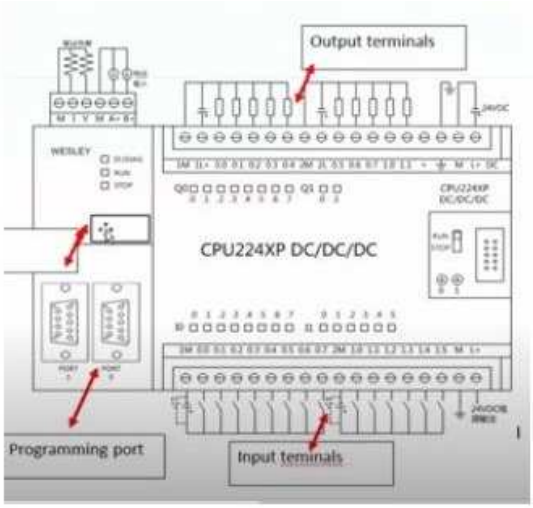
SIEMEN SIMATIC S S7-200 PLC

CPU226 DE DC/DC

216-2AD23-OXBO

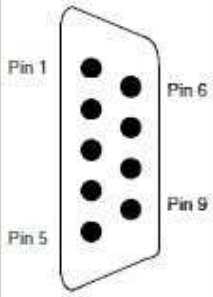
https://www.youtube.com/watch?v=QGsLqbZzA3Q&list=PLO_z-Qzju3sdgNwZJG-nMPlT5ds37BrR8



Connector Pin Assignments

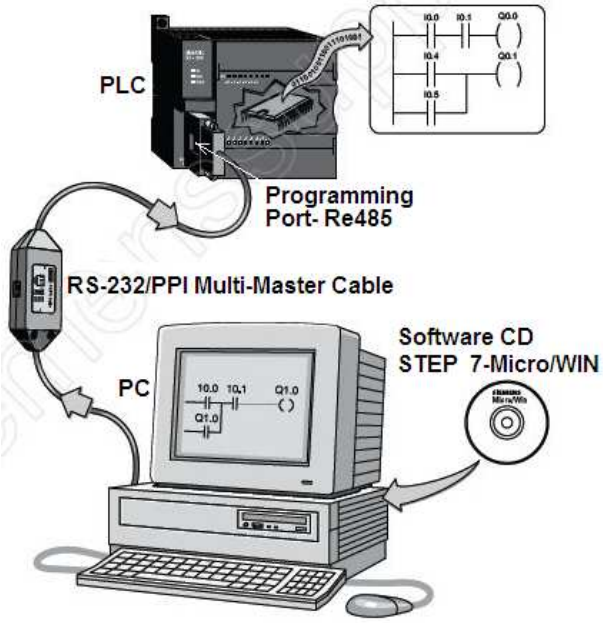
The communications ports on the S7-200 CPU are RS-485 compatible on a nine-pin subminiature D connector in accordance with the PROFIBUS standard as defined in the European Standard EN 50170. Table 7-7 shows the connector that provides the physical connection for the communications port and describes the communications port pin assignments.

Table 7-7 Pin Assignments for the S7-200 Communications Port

Connector	Pin Number	PROFIBUS Signal	Port 0/Port 1
	1	Shield	Chassis ground
	2	24 V Return	Logic common
	3	RS-485 Signal B	RS-485 Signal B
	4	Request-to-Send	RTS (TTL)
	5	5 V Return	Logic common
	6	+5 V	+5 V, 100 Ω series resistor
	7	+24 V	+24 V
	8	RS-485 Signal A	RS-485 Signal A
	9	Not applicable	10-bit protocol select (input)
	Connector shell	Shield	Chassis ground

There are six S7-200 CPU types (**CPU 221**, **CPU 222**, **CPU 224**, **CPU 224XP**, **CPU 224XPsi**, and **CPU 226**) and two power supply configurations for each type.

Model Description	Power Supply	Input Types	Output Types	Comm Ports
221 DC/DC/DC	20.4-28.8 VDC	6 x 24 VDC	4 x 24 VDC	1
221 AC/DC/Relay	85-264 VAC, 47-63 Hz	6 x 24 VDC	4 x Relay	1
222 DC/DC/DC	20.4-28.8 VDC	8 x 24 VDC	6 x 24 VDC	1
222 AC/DC/Relay	85-264 VAC, 47-63 Hz	8 x 24 VDC	6 x Relay	1
224 DC/DC/DC	20.4-28.8 VDC	14 x 24 VDC	10 x 24 VDC	1
224 AC/DC/Relay	85-264 VAC, 47-63 Hz	14 x 24 VDC	10 x Relay	1
224XP DC/DC/DC	20.4-28.8 VDC	14 x 24 VDC, 2 x Analog	10 x 24 VDC, 1 x Analog	2
224XP AC/DC/Relay	85-264 VAC, 47-63 Hz	14 x 24 VDC, 2 x Analog	10 x Relay, 1 x Analog	2
224XPsi DC/DC/DC	20.4-28.8 VDC	14 x 24 VDC, 2 x Analog	10 x 24 VDC (current sinking), 1 x Analog	2
226 DC/DC/DC	20.4-28.8 VDC	24 x 24 VDC	16 x 24DC	2
226 AC/DC/Relay	85-264 VAC, 47-63 Hz	24 x 24 VDC	16 x Relay	2



https://www.youtube.com/watch?v=nC82rhw3wUU&list=PLO_z-Qzju3sdgNwZJG-nMPlT5ds37BrR8&index=2

RS232 Pin Assignments *(DE9 PC signal set)*

Pin 1	Received Line Signal Detector (Data Carrier Detect)
Pin 2	Received Data
Pin 3	Transmit Data
Pin 4	Data Terminal Ready
Pin 5	Signal Ground
Pin 6	Data Set Ready
Pin 7	Request To Send
Pin 8	Clear To Send
Pin 9	Ring Indicator

*The connector on the PC has male pins, therefore the mating cable needs to terminate in a DE9/F (Female pin) connector. [Some people call this a **DB9**... DE9 is the real name, however]*

PC/PPI cable for RS232 interface on the PC side have a 9-Pin Sub-D connector. The pining you can find in the S7-200 system manual

Please note that it is RS232 from your PC to the PPI adaptor, then it gets converted to RS485 from the adaptor to the PLC. Do not connect RS232 right into the PLC in order to avoid burning the port.

from: http://www.plctalk.net/qanda/showthread.php?t=9799

The PPI cable is a simple data-driven RS232-RS485 converter, powered by the PLC.

The pin configuration for the RS232 side is:
2 - Received Data (PC listens)
3 - Transmitted Data (PC Sends)
5 - Signal Common

At the RS485 side you have to find:
1 - Shield (also PLC logic common)
2 - GND (PLC logic common)
3 - Signal B
7 - +24V power from the PLC
8 - Signal A
Baudrates are selectable between 600, 1200, 2400, 9600, 19200 and 38400.

Here is the RS232 pinout:
http://airborn.com.au/serial/rs232.html

USB/PPI ADAPTER 9-PIN D-TYPE MALE CONNECTOR PIN DETAIL