

CV300

Communication converter

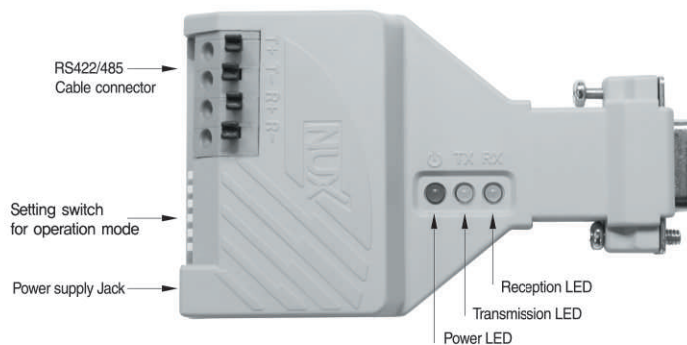
- Convert RS232 signal to RS422 / 485 signal
- RS422/485 Line Drive auto control
- RS232 and RS422 / 485 electrical insulation (2.5KV) and protective device built in
- Possible to set as various operation modes through the switch setting (2 wires, 4 wires, full duplex, half duplex, terminating resistance activation/deactivation)
- 1.5 km max, 256 node connections possible
- For the power state indication and data communication state displaying LED



Rating and function

Power	9 V, 300 mA DC Adapter (1.3 Ø DC Jack)
Communication speed	2400 ~ 115200 bps
Communication distance	1.5km max and possible to connect max 256 devices
Safety	1/2 circuit insulation, built in the surge protective device, automatically forms ± 15 KV ESD Protection Line Drive signal
Function setting	2 wires/4 wires, usage of the built in terminating resistance, full duplex/half duplex setting Possible
Connection method	RS232 → DB-9 Female (possible to connect directly to the serial port of PC), RS422/485 → method of inserting communication wire to the 4 pin terminal block.
Switch setting	6 Pin Piano Type Dip-Switch
Case material	Made of plastic
Weight	Body : 60 g, Adapter 300 g
Dimension	52 x 90 x 20 mm

Name and function of each part



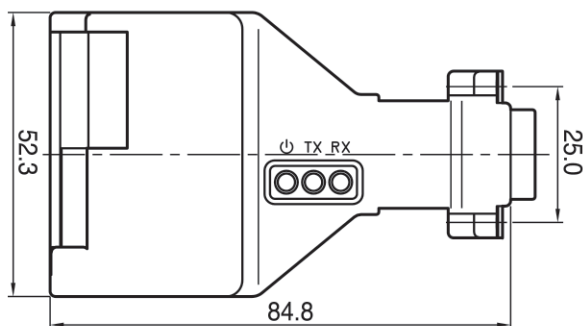
A

Temperature
Controller

●● Function setting (DIP S/W)

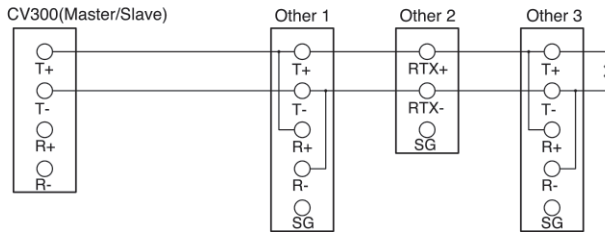
1. ON → T+ and R+ internal connection (when communicating as 2 wire type)
2. ON → T- and R- internal connection (when communicating as 2 wire type)
3. ON → Enable the built in terminating resistance (when installing at the end of communication line (both side))
4. Empty terminal to keep the gap between 1/2 circuit insulation(No function)
5. ON → half duplex communication (2 wire or 4 wire half duplex)
OFF → full duplex communication (4 wire point to point or multi drop master, 2 wire echo mode)
6. Delay time selection of Line Drive signal automatic creation (When transmitting the data, run the communication line for a certain period of fixed time with standardizing the start bit. Response Delay setting required at the opposite side of device in order to prevent the data crash when performing the 2 wire communication)
ON → with high speed communication(19200 ~ 115200 bps), communication line run time is 0.6 msec/byte
OFF → with low speed communication(2400 ~ 9600 bps), communication line run time is 5msec/byte

●● Dimension (Unit : mm)



●● Connection diagram

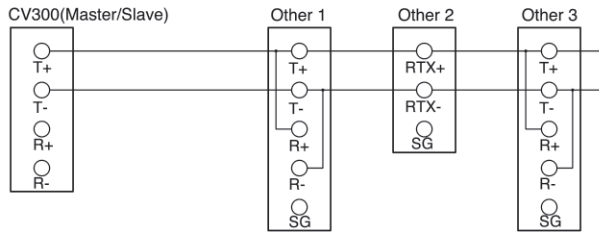
■ 2 wires half duplex



Dip S/W

1	2	3	4	5	6
ON	ON	ON/OFF		ON	ON/OFF

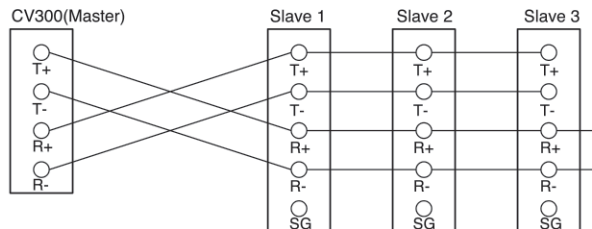
■ 2 wires full duplex (echo mode)



Dip S/W

1	2	3	4	5	6
ON	ON	ON/OFF		OFF	ON/OFF

■ 4 wires full duplex



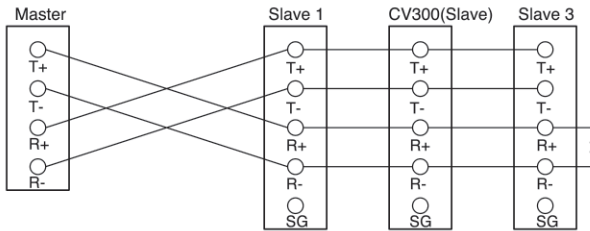
Dip S/W

1	2	3	4	5	6
OFF	OFF	ON/OFF		OFF	ON/OFF

A

Temperature Controller

■ 4 wires half duplex



Dip S/W

1	2	3	4	5	6
OFF	OFF	ON/OFF		ON	ON/OFF

■ RS232 extending cable connection method

