

Chapter 6 System configuration

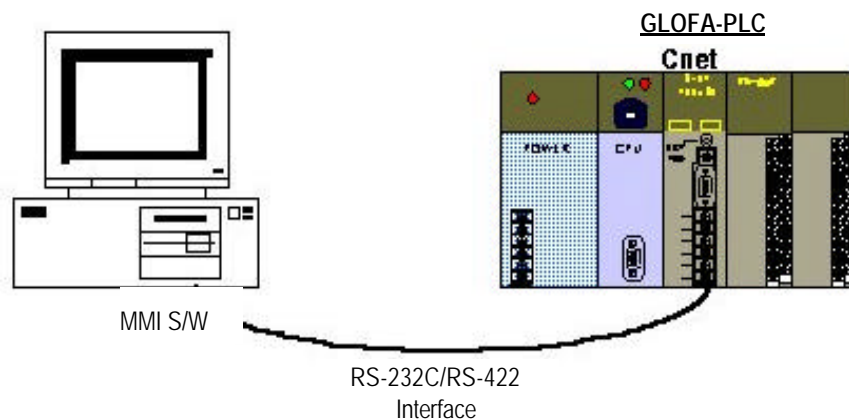
Various communication systems can be configured via this module in accordance with application fields. This chapter describes examples of system configurations which are available or unavailable for the application fields.

6.1 System configuration available

6.1.1 1:1 Connection (no modem) to PC

PC and Cnet are connected via RS-232C or RS-422 channel in 1:1 connection system with PC or PLC not through modem. Most PCs are operated as master stations and Cnet I/F modules are operated as slave stations that respond the request of PC. Since no modem is applied, communication distance is max.15m via RS-232C channel and max.500m via RS-422 channel. Operation mode of Cnet I/F module shall be set as agreed with communication type of PC.

[Figure 6.1] 1:1 communication system with PC

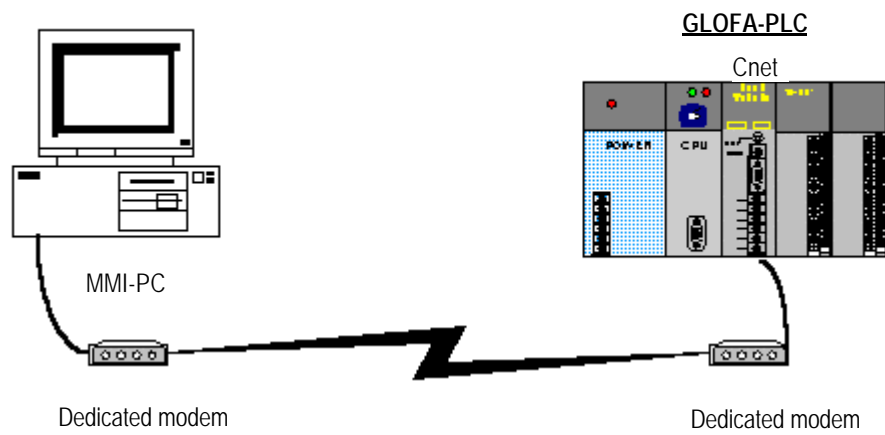


Type	Module setting			
	RS-232C	RS-422	Channel mode	Station No.
GLOFA PLC Cnet	Dedicated mode	Dedicated mode	Stand-alone channel	0 ~ 31
	Other company's dedicated mode	Other company's dedicated mode		

6.1.2 1:1 Dedicated modem connection to PC

PC and the module are connected through dedicated modem via RS-232C channel in 1:1 connection system. Most PCs are operated as master stations and Cnet I/F modules are operated as slave stations that respond the request of PC. Since modem is applied to go through, RS-232C channel shall be set to dedicated modem for long-distance communication. Operation mode of this module shall be set as agreed with communication type of MMI PC.

[Figure 6.2] Dedicated modem communication with PC



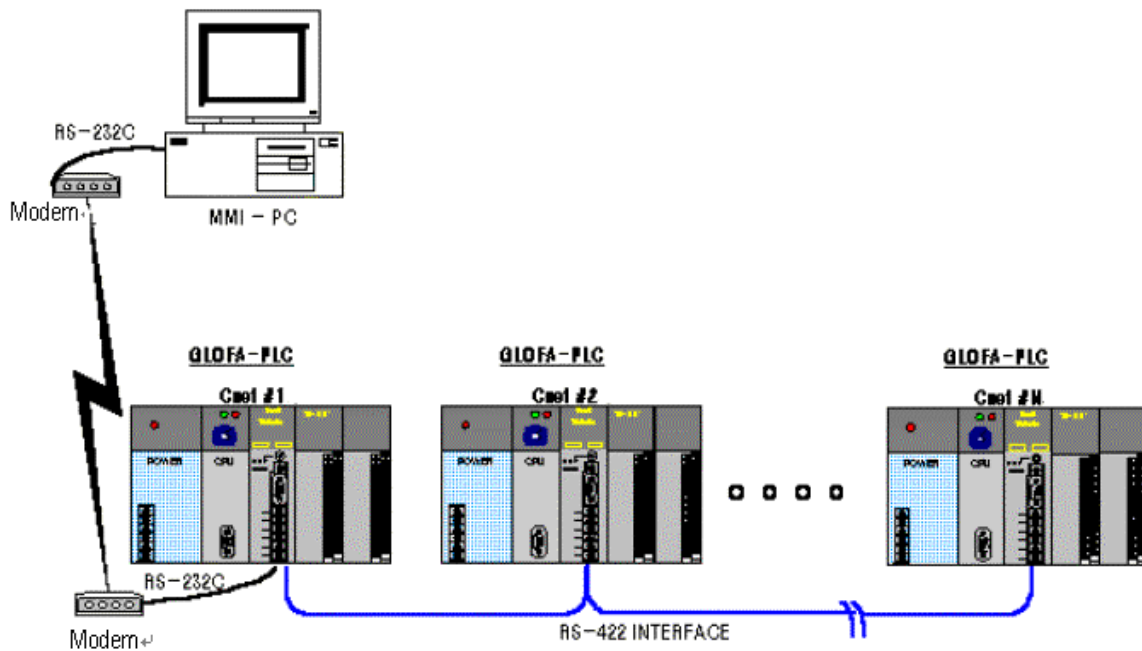
Cnet I/F module can be operated in dedicated mode or other company's dedicated mode.

Type	Module setting			
	RS-232C	RS-422	Channel mode	Station No.
GLOFA PLC Cnet	Not used	Dedicated mode Other company's dedicated mode	Stand-alone channel	0 ~ 31

6.1.3 Modem connection to PC & Communication between Cnet I/F modules

- PC and Cnet #1 station are connected through modem via RS-232C channel
- Cnet #1 station ~ N station carry out communication between Cnets via RS-422 channel
- PC is operated via master station of Cnet #1 station
- Cnet I/F module can connect with max. 32 stations (RS-422/485 communication)
- 1 station of Cnet I/F modules is set to master station.
- Dedicated modem or dial-up modem is available to use.
- Cnet I/F module is set to stand-alone mode

[Figure 6.3] Dedicated modem communication with PC

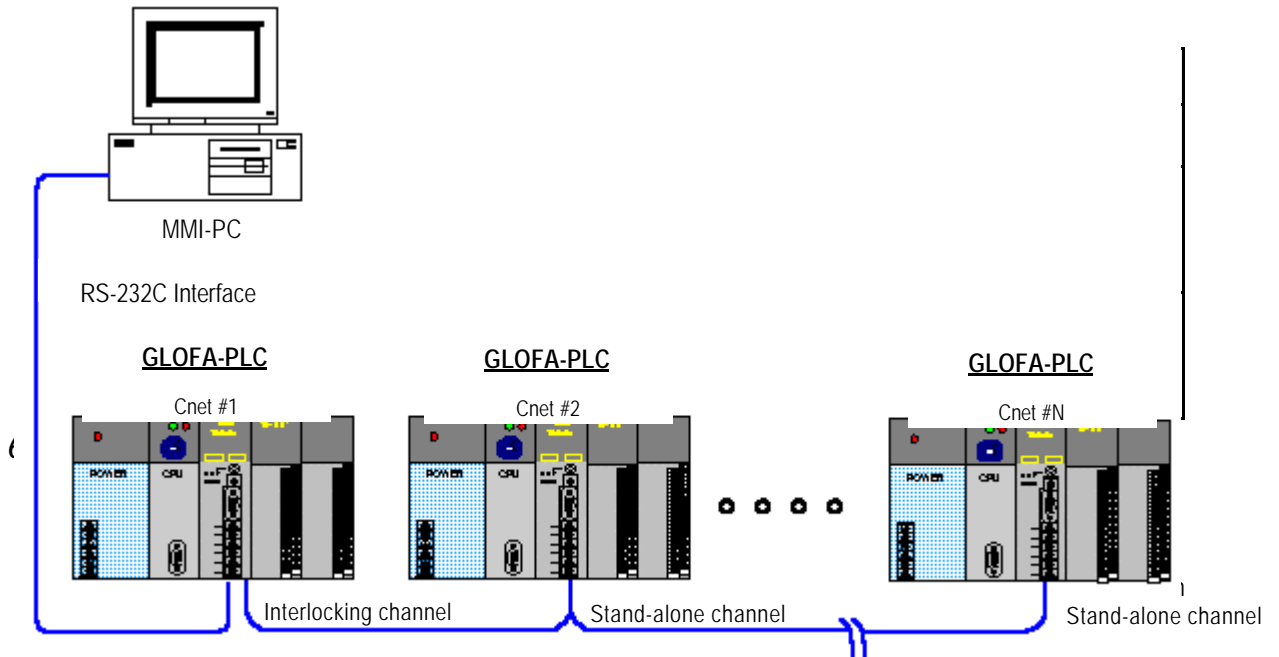


Type	Module setting			
	RS-232C	RS-422	Channel mode	Station No.
PLC Cnet #1	Dedicated mode	Dedicated master	Stand-alone channel	1
		User defined		
Cnet #1~#31	Not used	Dedicated mode	Stand-alone channel	2~31

6.1.4 Communication between PC and Cnet using interlocking channel

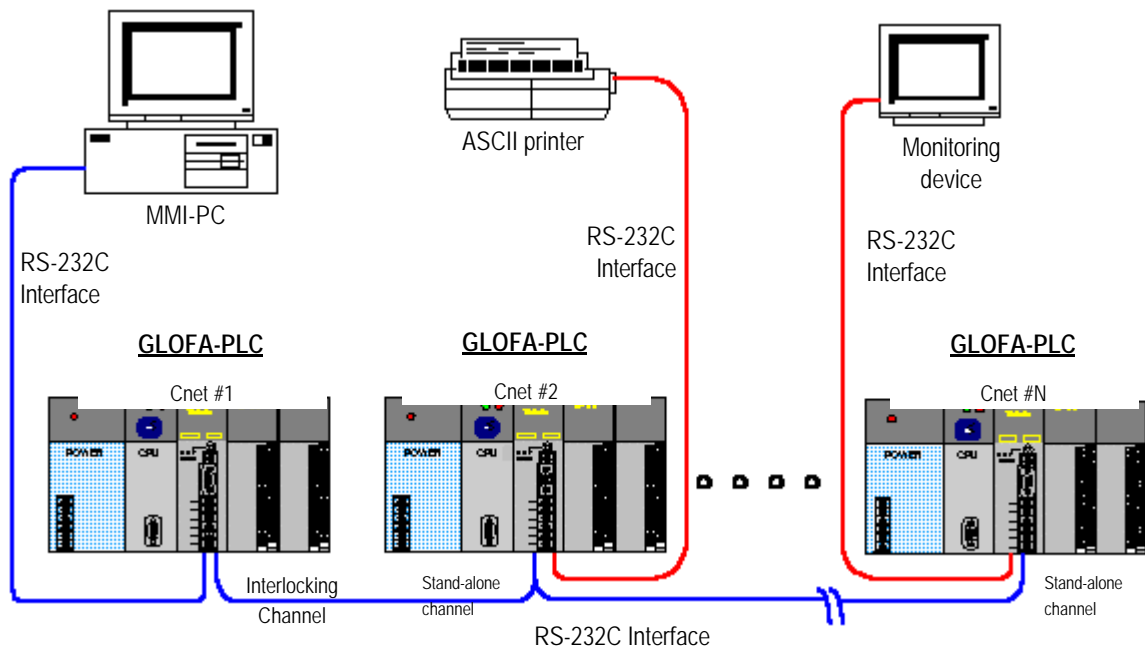
- ❑ PC is operated as a master station of Cnet #1 ~ #N station.
- ❑ PC and Cnet #1 station carry out communication through null modem via RS-232C channel.
- ❑ PC as a master station carry out RS-422 communication with Cnet #2 ~ #N station via Cnet #1 station in interlocking channel.
- ❑ PC and Cnet #1 station perform RS-232C channel communication.
- ❑ Communication between Cnet I/F modules is unavailable.
- ❑ Cnet I/F module can connect with max. 32 stations (RS-422 communication).
- ❑ Cnet #1 station is set to interlocking mode and Cnet # 2 ~ #N station are set to stand-alone mode.
- ❑ All Cnet I/F modules shall be set to identical communication speed and operation mode.

[Figure 6.4] Dedicated modem communication with PC



- ❑ PC and Cnet #1 station perform RS-232C communication via RS-232C Interface.
- ❑ Communication between Cnet I/F modules is unavailable.
- ❑ Cnet I/F module can connect with max. 32 stations (RS-422 communication).
- ❑ Cnet #1 station is set to interlocking mode and Cnet#2 ~ #N station are set to stand-alone mode.
- ❑ All Cnet I/F module RS-422 channels shall be set to identical communication speed and operation mode.
- ❑ Cnet I/F module #2 ~ #N station communicate with PC via RS-422 channel and with monitoring device and printer via RS-232C channel.
- ❑ If monitoring device is GP or PMU, RS-232C of Cnet #N station can be set to dedicated mode.

[Figure 6.5] Compound system of interlocking and stand-alone channels

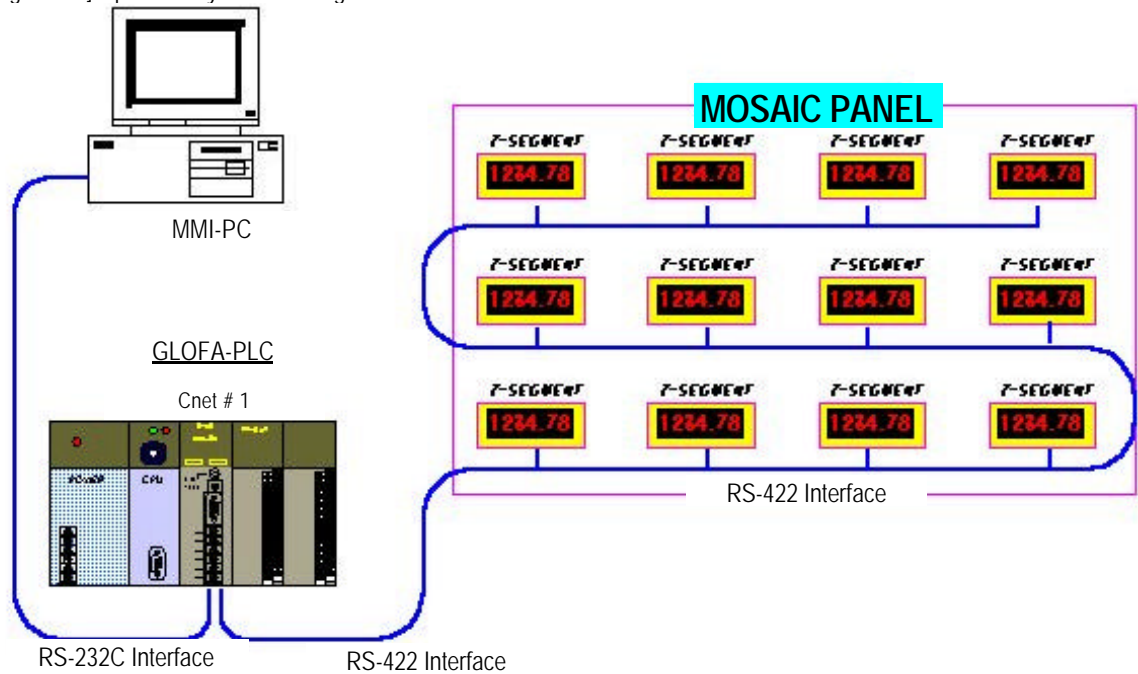


Type	Module setting			
	RS-232C	RS-422	Channel mode	Station No.
PLC Cnet #1	Dedicated mode	Not used	Interlocking channel	1
	Other company's dedicated mode			
Cnet #2-#31	Dedicated mode	Dedicated mode	Stand-alone channel	2-31
	User mode	Other company's dedicated mode		

6.1.6 Dedicated communication with PC & Other company's RS-422 communication

- Null-modem communication with PC via RS-232C channel is available.
- PC is operated as a master station and Cnet I/F module RS-232C channel is operated as a dedicated slave.
- Cnet I/F module RS-422 channel is operated in user defined mode.
- Display data is transmitted to display modules of mosaic panel via Cnet RS-422 channel.
- Display transmission data can be read in PC.

[Figure 6.6] Operation system of 7-segment for RS-422

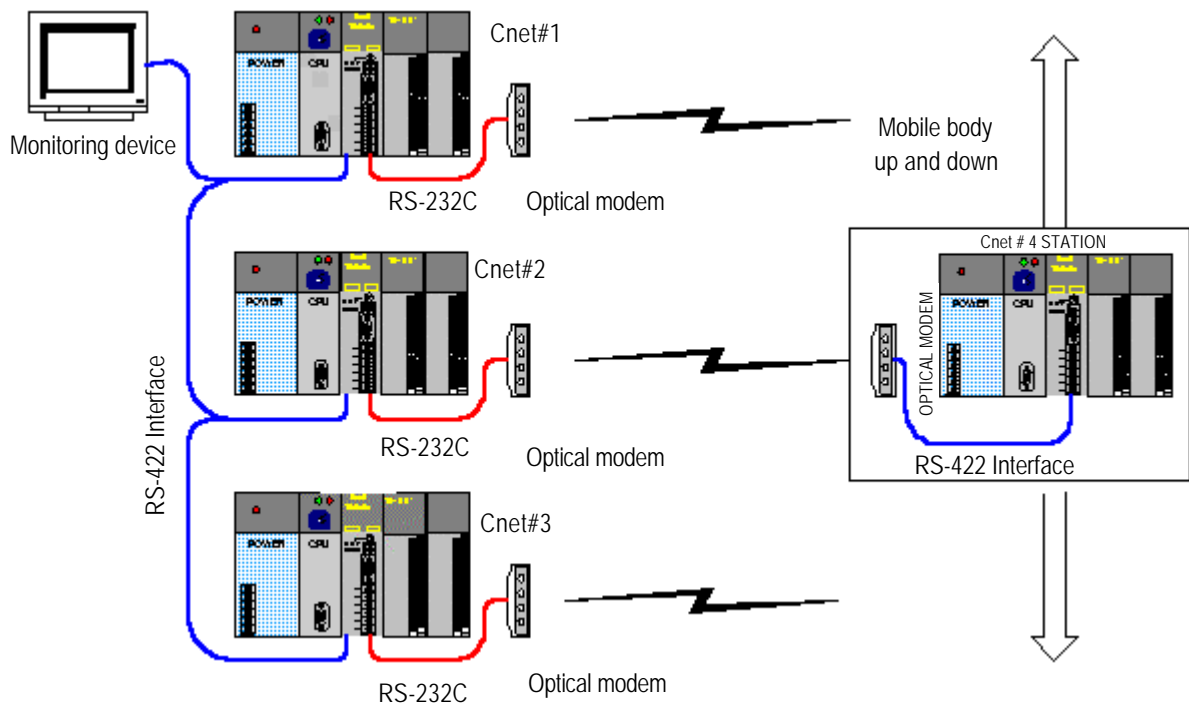


Type	Module setting			
	RS-232C	RS-422	Channel mode	Station No.
PLC Cnet #1	Dedicated mode	User mode	Stand-alone channel	1
	Other company's dedicated mode			

6.1.7 Optical modem communication for mobile communication

- ❑ Optical modem communication system for Cnet communication on body in lineal motion.
- ❑ Dedicated mode communication or user defined communication with monitoring device.
- ❑ RS -232C/RS-422 communication with optical modem.
- ❑ Dedicated master/slave communication between Cnet I/F modules. Ver.2.0
- ❑ User defined communication between Cnet I/F modules in former version than Cnet Ver. 2.0.
- ❑ Optical modem connected with Cnet I/F module on mobile body can communicate with the other optical modem only when positioned in communication available.
- ❑ Main application: Parking tower

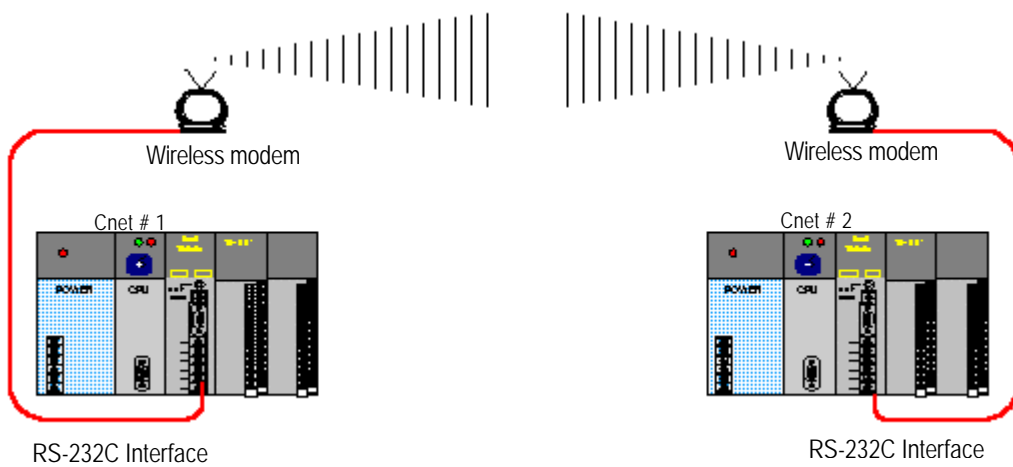
[Figure 6.7] Optical modem communication system.



6.1.8 Wireless modem communication between revolution bodies

- Wireless modem communication system for Cnet communication on body in revolution motion.
- RS-232C communication with wireless modem.
- Dedicated master/slave communication between Cnet I/F modules. Ver.2.0
- User defined communication between Cnets in former version than Cnet Ver. 2.0.
- RS-232C channel of Cnet I/F module is dedicated modem mode.

[Figure 6.8] Wireless modem communication system.

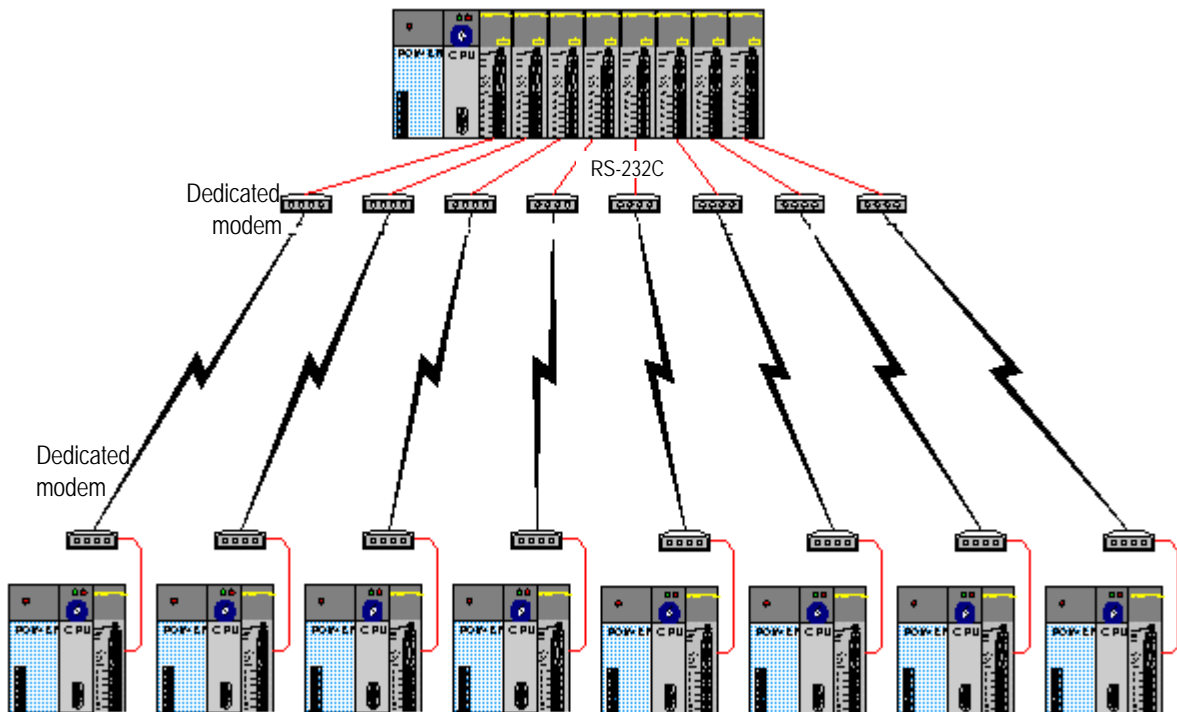


Type	Module setting			
	RS-232C	RS-422	Channel mode	Station No.
Cnet #1~#2	Dedicated mode	Not used	Stand-alone channel	
	User mode			

6.1.9 TM/TC communication system

- ❑ Long-distance communication with remote slave PLC via dedicated modem.
- ❑ Dedicated modem communication via RS-232C channel set to dedicated modem mode.
- ❑ Dedicated master/slave communication between Cnet I/F modules. **Ver.2.0**
- ❑ User defined communication between Cnets in former version than Cnet Ver. 2.0.
- ❑ Max.8 Cnet I/F modules can be mounted on TM master PLC using GM1/2/3.

[Figure 6.9] TM/TC dedicated modem system

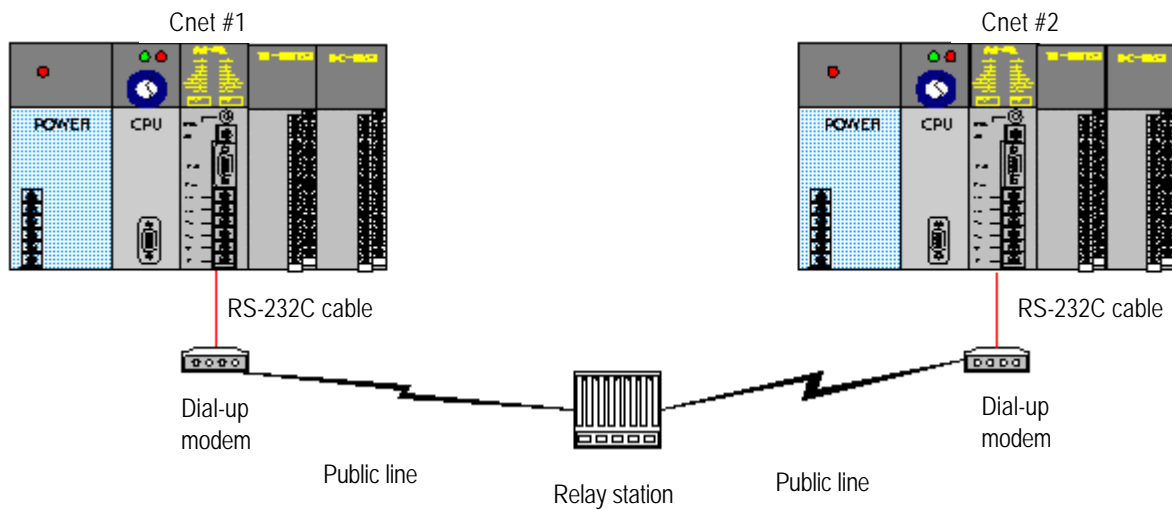


6.2 System configuration unavailable

6.2.1 Dial-up modem communication between Cnet I/F modules

- ❑ Cnet I/F module has no function to make telephone calls.
- ❑ Cnet I/F module has only function to answer telephone calls.
- ❑ Dial-up modem communication between Cnet I/F modules is unavailable.

[Figure 6.10] Dial-up modem communication between Cnet I/F modules



6.2.2 GMWIN connection using RS-422 channel of Cnet I/F module

- ❑ GMWIN service of Cnet I/F module supports only RS-232C channel.
- ❑ GMWIN connection via RS-422 channel is unavailable.
- ❑ Setting of Cnet's station number in GMWIN remote connection is unavailable.
- ❑ GMWIN connection is available only for Cnet #1 station as shown in [Figure 6.11].

[Figure 6.11] GMWIN connection via RS-422 channel

