## **Chapter 1 Introduction**

These instructions give a technically full explanation of the GLOFA-GM Ethernet, Ethernet Module, among GLOFA PLC system network modules.

If you want to write a program, please refer to the instructions below.

- Command collection of GLOFA PLC
- Instructions for GLOFA PLC GMWIN

When making up GLOFA Ethernet system, please take notice of the following.

GLOFA PLC GMWIN Program Tool: Above ver 3.0

GLOFA GM1/2 CPU : Above ver 1.2
GLOFA GM3 CPU : Above ver 1.8

GLOFA Enet possesses the following characteristics.

## **GLOFA Enet:**

follows IEEE 802.3 standards. (Support Ethernet standards). supports the protocols of ARP, ICMP, IP, UDP, TCP.

is accessible to data by using public network.

supports Dynamic Connection/Disconnection by using Function Block.

supports high-speed link for high-speed data communication between the modules of one's own company.

is able to communicate with 16 countries at the same time except the highspeed link. (Dedicated line + Function Block communication).

makes GMWIN loader service possible through Ethernet. (Dedicated TCP/IP PORT: 2002 allocation).

supports 10BASE5, 10BASE2, 10BASE-T media all.

connects easily with the systems of other companies by using Function Block and frame editor

possesses the function to monitor network status and collect information. (one's own communication module).

(one of this communication module).

sets up automatically TCP port  $\underline{2004}$ , UDP port  $\underline{2005}$ , high-speed link port

 $\underline{2006},\,\underline{2007}$  for channel list when power is on. (Ports such as 2002, 2004,

2005,2006,2007 should not be used in Function Block service.)

makes Variable READ/WRITE service possible by using Function Block.

(Using Dynamic Connection)

is able to install maximum 4 Ethernet communication modules in one basic base.

Supports various system configurations by changing the basic parameters.

## 1.1 Matters that demand special attention when using

When you install this equipment, please give special attention to the following for reliability and safety of system.

| Item               | Classification | Contents   |
|--------------------|----------------|--|
| Temperature        | Condition      | When installing the equipment, ambient temperature must maintain between 0 and 55C due to the use of degauss.  The equipment should not be exposed to direct ray of light.   |
|                    | Measures       | If the temperature is high, you should install fan or air-<br>conditioner, and if it is low the other way, you should<br>keep up a proper temperature.   |
| Dewfall            | Condition      | Dew should not be forming at a sudden temperature change.  Please install it in the water- and dustproof control board.  |
|                    | Measures       | Frequent On/Off of power can cause the dewfall by the sudden temperature change. In this case, you should switch on even in the night.   |
| Shock              | Condition      | Please do not install it in a place where a shock or vibration is not applied.   |
|                    | Measures       | In case of a lot of shocks and vibration, you should take proper measures by means of protection rubber to keep them from the equipment.   |
| Gas                | Condition      | Please install it in a place where there is no corrosive gas.  |
|                    | Measures       | If the corrosive gas comes from outside, take proper measures against it with the air in the control board cleaning.   |
| EMC<br>environment | Condition      | Please install it in a place where there is enough electromagnetic compatibility.  |
|                    | Measures       | Please select the exact cable path during wiring work.  Confirm if the control board is properly protected from electromagnetic field.  Please use glow lamp rather than fluorescent lamp in the control room.  When installing power module, you must earth on the standard electric potential. |