Chapter 3 General Specification

3.1 General Specification

General standard of communication module in GLOFA-GM series is as follows:

No.	Item	Standard						Related standard
1	Service Temp.	0 +55						
2	Storage Temp.	-25 +70						
3	Service Humidity	5 95%RH, dew should not fall.						
4	Storge Humidity	5 95%RH, dew should not fall.						
5	Internal Vibration	In case of sporadic vibration						IEC 61131-2
		Frequency	Acceleration	Amplitude		Times		
		10 f< 57	-	0.075mm		X,Y,Z 10 times for each direction		
		57 f 150	9.8	-				
		In case of continuous vibration						
		Frequency	Acceleration	Amplitude				
		10 f< 57	-	0.035mm				
		57 f 150	4.8 (0.5G)	-				
6	Internal Shock	* Maximum shock acceleration:147 (15G) * Ack. time:11 * Pulse waveform: a sine carrier wave pulse (X,Y,Z 3 times each for 3 directions)						IEC 61131-2
7	Internal Noise	Square wave impulse noise	± 1,500V					Internal test standard of LG Industrial Systems.
		Dscharge of static electricity	Voltage : 4 kV(touch discharge)					IEC 61131-2, IEC 1000-4-2
		Radial computer noise	27 ~ 500 MHz, 10 V/m					IEC 61131-2, IEC 1000-4-3
		Fast transient /Burst noise	division	Power module	Digital in-/output (over24V)	Digital in-/output(over24V) Analog in-/output Communication interface		IEC 61131-2, IEC 1000-4-4
			Voltage	2 kV	1 kV	0.25 kV		
8	E nvironment	There should not be corrosive dust.						
9	Service Altitude	Below 2000m						
10	Pollution level	Below 2						
11	Cooling system	Natural air cooling system						

[Table 3.1] General Standard

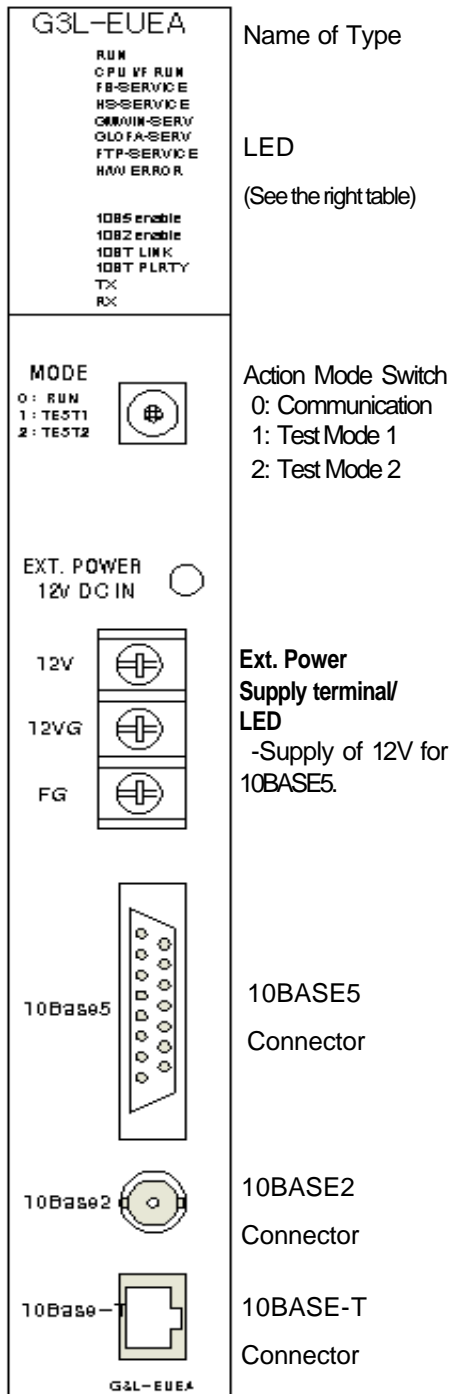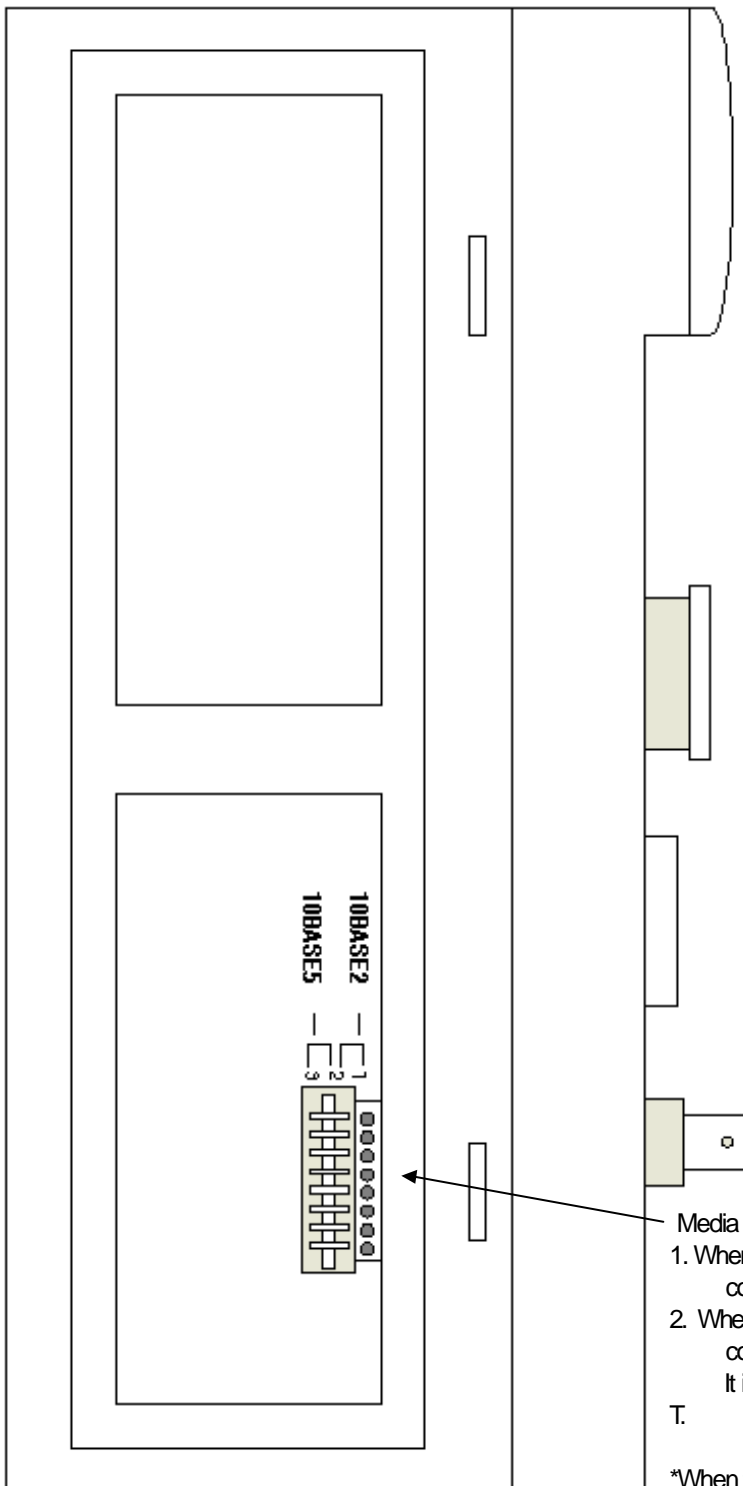| Remark |
| --- |
| Note1) IEC (International Electrotechnical Commission)
    International non-governmental organization promoting international cooperation on standardization
    of electric and electronic techniques. It also sets international standards, and evaluates, manages
    their suitability.
Note2) Pollution Level
    An index showing the extent of pollution of service environment for a device which is crucial for
    its performance. The pollution level 2 means generally the status in which only non-conductible
    pollution occurs. But, conduction existence because of dewfall also means pollution level 2. |

3.2 Structure and Components

3.2.1 The Structure of G3L-EUEA

1) The Front part

Name of Type

LED

(See the right table)

Action Mode Switch
 0: Communication
 1: Test Mode 1
 2: Test Mode 2

**Ext. Power
Supply terminal/
LED**
 -Supply of 12V for
 10BASE5.

10BASE5

Connector

10BASE2

Connector

10BASE-T

Connector

LED No.	Module Front Mark	Description
0	RUN	On when the power supply and sole initialize of module are normal.
1	CPU I/F RUN	On when it can normally communicate with CPU module
2	FB-SERVICE	Out at the service of function block.
3	HS-SERVICE	Out at the service of high-speed link.
4	GMWIN-SERVICE	On when connecting with GMWIN service.
5	GLOFA-SERVICE	On when connecting with dedicated service.
6	FTP-SERVICE	On when connecting with FTP service.
7	HW-ERROR	On when it is impossible for the module to recover an error by itself.
8	–	No use.
9	–	No use.
10	10BASE5 Enable	On when it enables to use 10BASE5.
11	10BASE2 Enable	On when it enables to use 10BASE2.
12	10BASE-T LINK	On when able to link to 10BASE-T.
13	10BASE-T PLRTY	On when connected polarity of 10BASE-T is normal.
14	TX	Out when transporting data.
15	RX	Out when receiving data.

2) The Side part

Media Option Switch
1. When you select 10BASE2, you should link the
   connector to the mark 1, 2 .
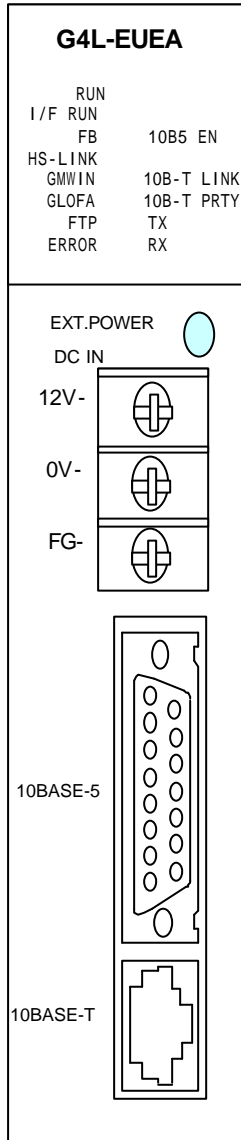2. When you select 10BASE5, you should link the
   connector to the mark 2,3.
   It is better to link it here when you use 10BASE-
T.

*When the product is out on the market, 10BASE5
is already selected..

3.2.2 The Structure of G4L-EUEA

1) The Front part

G4L-EUEA		Name of Type

G4L-EUEA

RUN
I/F RUN
FB   10B5 EN
HS-LINK
GMWIN   10B-T LINK
GLOFA   10B-T PRTY
FTP   TX
ERROR   RX

LED

(See the right table)

EXT.POWER

DC IN

12V -

0V -

FG -

Ext. Power Supply terminal/ LED
-Supply of 12V for 10BASE5.

10BASE-5

10BASE5

Connector

10BASE-T

10BASE-T

Connector

LED No.	Module Front Mark	Description
0	RUN	On when the power supply and sole initialize of module are normal.
1	I/F RUN	On when it can normally communicate with CPU module
2	FB	Out at the service of function block.
3	HS-LINK	Out at the service of high-speed link.
4	GMWIN	On when connecting with GMWIN service.
5	GLOFA	On when connecting with dedicated service.
6	FTP	On when connecting with FTP service.
7	ERROR	On when it is impossible for the module to recover an error by itself.
8	--	No use.
9	--	No use.
10	10B5 EN	On when it enables to use 10BASE5.
11	--	No use.
12	10B-T LINK	On when able to link to 10BASE-T.
13	10B-T PRTY	On when connected polarity of 10BASE-T is normal.
14	TX	Out when transporting data.
15	RX	Out when receiving data.