## Server Module

General

The server module controls the data traffic on the backbone and must therefore feature in every system. All the data recorded by the modules (e.g. statuses of the modules' digital and analogue inputs, radio controlled clock times etc.) are transferred to the master via the BUS where they are buffered in the data memory. The master processes the recorded data using a user-specific program and returns, depending on the result of the processed input data, data to the modules' outputs (e.g. analogue and digital outputs). Once again, the data is transferred from the master to the modules via the BUS. The program is created by the user with
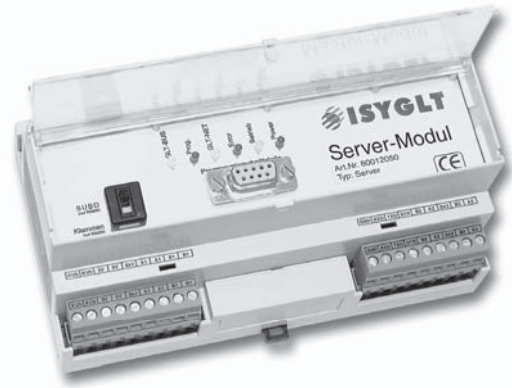
"ProgrammDesigner" (ProgrammDesigner is the programming software for the ISYGLT BUS system), transferred to the master via a programming interface (RS-232) and saved there in the program memory. The program memory can be written as often as you like and even keeps its data in the event of an operating voltage failure. Up to 128 modules are operated on the master subnet. The programm memory is limited to 8 KByte.

Function displays

- 1 red "power" LED indicates the supply voltage. This LED comes on when supply voltage is applied to the module.
- 1 green flashing "operation" LED indicates the processor function. Steady flashing means "system o.k., however no DCF-77 time received".2x short flashes followed by a pause means "System o.k. and valid DCF-77 time received".
- 1 red "error" LED indicates an error. This LED indicates an error in the master operating system.
- 1 yellow flashing "GLT Net" LED indicates trouble-free data transfer on the backbone. It is only possible to network several master modules with art. no. 80011150.
- 1 red "prog" LED indicates that programs are being transferred from the PC/modem to the master and vice versa via the programming interface.
- 1 yellow flashing "bus" LED indicates trouble-free data transfer on the subnet.

Connections

- 2 connections for the subnet (BUS A and B, RS-485)
- 2 connections for the operating voltage (Ub, 0V)
- 1 connection for the second serial interface (e.g. for remote maintenance)
- 1 connection for the third serial interface (optional for networking several master modules only possible with Art. no. 80011150)

Design

- Light grey plastic casing, can be snapped onto 35 mm DIN rail mounting 9 separating units

Special function DIP switch

Switch S1 is located behind the transparent cover on the master module. You have to lift up the cover for configuration.

Special function DIP switch (continued)

• **S1**
- **SUBD setting:**
The RS-232 interface for programming the master module is led through the SUBD socket.
- **Terminal setting:**
The RS-232 interface for controlling the connected appliance is led through the GND, RXD and TXD terminals (e. g. modem).
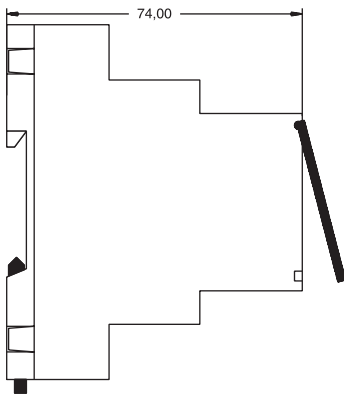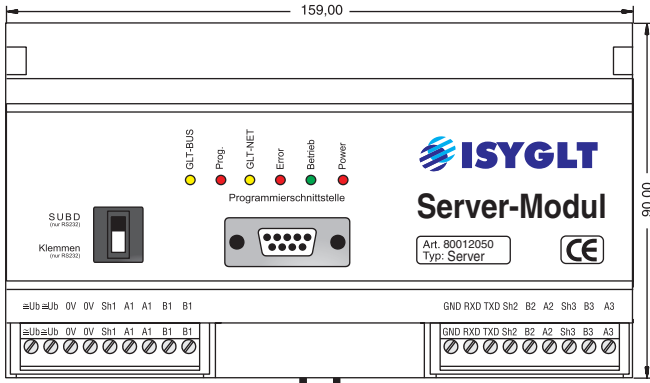
Technical data

Type	Server-Module
Art.-Nr.	80012050
Operating voltage	12V to 35V DC or 12V to 27V AC
Power consumption	12V DC 130mA, 24V DC 70mA, 35V DC 60mA
	12V AC 140mA, 24V AC 75mA, 27V AC 70mA
Interface 1	RS-485 for the ISYGLT subnet BUS for communication with modules
Interface 2	RS-232 or (RS-485 optional) interface for PC/modem connection
Interface 3	floating RS-485 for the ISYGLT backbone BUS for networking several master modules
Program memory	64 kbyte (EPROM) program memory for user program: 24 kbyte (EEPROM) programmable (8 KByte for Subnetprogramming useable) data memory 1: 32 KByte (RAM) EEPROM-cached, non-volatile data memory 2: 4 kbytes (EEPROM) for switching times, non-volatile data memory 3: 8 kbytes optionally upgradeable to 32 kbytes (EEPROM) for lighting scenes, non-volatile
Dimensions	WxHxD 160x90x74mm (9 separating units)
Weight	300 g
Connection	Terminals 2,5mm² plug-in
Operating voltage	-10°C...+50°C
Storage temperature	-25°C...+70°C
Humidity	0...85 % relative humidity, non-condensing
Protection class	IP 30
ESD immunity	Category 3 according to IEC-1000-4-2 (4 kV static)
EMC immunity	Use in typical industrial environment Category 3 according to IEC-1000-4-4 (Test was carried out within a whole system)
CE mark	yes

Terminal assignment

Terminals	Left
$\cong$ Ub	Operating voltage
$\cong$ Ub	Operating voltage
0V	0V operating voltage
0V	0V operating voltage
Sh.1	Remains free
A 1	Subnet (BUS A, RS-485)
A 1	Subnet (BUS A; RS-485)
B 1	Subnet (BUS B, RS-485)
B 1	Subnet (BUS B, RS-485)

Terminals	Right
GND	Programming interface (RS-232) ground
RxD	Programming interface (RS-232) RxD receive path
TxD	Programming interface (RS-232) TxD send path
Sh.2	Remains free
B 2	Programming interface B (RS-485)
A 2	Programming interface A (RS-485)
Sh.3	Remains free
B 3	Backbone (BUS B, RS-485)
A 3	Backbone (BUS A, RS-485)

View

GLT-BUS
Prog.
GLT-NET
Error
Betrieb
Power

159,00

90,00

Programmierschnittstelle

S U B D
(nur RS232)

Klemmen
(nur RS232)

⎓Ub⎓Ub 0V 0V Sh1 A1 A1 B1 B1

GND RXD TXD Sh2 B2 A2 Sh3 B3 A3

®ISYGLT

Server-Modul

Art. 80012050
Typ: Server

CE

74,00

ISYGLT®

Wiring diagram

Diagram labels:

L-St.(230V/50Hz)
N-St.
+24V
0V=
BUS-A
BUS-B
Subnet
NET-A
NET-B

ISYGLT-power-supply
230V 50/60Hz / 24V 4,0A-S
Art.-Nr.: 80030040

ISYGLT-server
Art.Nr.: 80012050   with batterie RAM
Ub 0V BUS A1 BUS B1
BUS A2 BUS B2 BUS A3 BUS B3

ISYGLT-power-supply
230V 50/60Hz / 24V 4,0A-S
Art.-Nr.: 80030040

MA-3S-BR
ISYGLT-master-module
Art.Nr.: 80011150   with batterie-RAM
Ub 0V BUS A1 BUS B1
BUS A2 BUS B2 BUS A3 BUS B3

Backbone to another master-modules