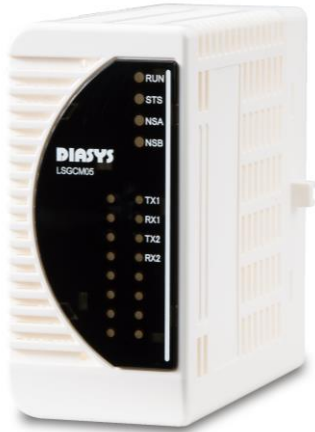


LSGCM05 CAN Communication module

LS communication CAN 2 ch

■ Summary



* Communication port : 2 (Individual isolation)

* Module ambient temperature : -5 to 60°C

LSGCM05 CAN Communication module

LS communication CAN 2 ch

Specifications

ITEM		SPECIFICATION
Communication port	Number of channels	2 (Individual isolation)
	Communication speed	50 K, 125 K, 250 K, 500 K, 1 Mbps *Compliant with ISO 11898 standard
	Communication size	Maximum transmit / receive total 12 Kbytes
	Supported protocol	Standard CAN (Standard format only) CANopen (Standard format only) J1939 (Extended format only)
	Number of registered commands	Event transmission command: 100 pcs / channel * ¹ Periodic send command: 100 pcs / channel * ¹ Receive command: 100 pcs / channel * ¹
	Support command	CANopen Transmit / receive NMT master message Sending / receiving Guarding request message Send / receive Heartbeat message Send / receive Emergency message Send / receive Sync message Transmit / receive Process data message J1939 Address Claim function not supported (No dynamic network configuration change) Packet segmentation function not supported (Maximum data length of one message is 8 bytes) Supplement)Position the extended ID and specify it in the communication setting file
Duplication correspondence		Possible (Two units installed , Select data in CPU Application Logic) * ²
Terminating resistance		Required for external line connection terminal block side
Dielectric voltage		DC 500 V
Communication with IOA	Communication method	LVDS
	Communication speed	100 Mbps
Self-diagnostic functions		Power voltage check (24 V, 3.3 V, 1.2 V) Clock abnormal check (FPGA-MCU for diagnosis, MCU for diagnosis -FPGA) Heartbeat check (FPGA-MCU for diagnosis, MCU for diagnosis -FPGA) CRC check (FPGA) Check communication setting file Communication check WDT monitoring (communication MCU)
Protection	(Power supply protection)	Overvoltage protection Overcurrent protection
Indicator	Status indication LED	4: RUN (Run) / STS (Status) / NSA (Network status A) / NSB (Network status B)
	Communication LED	4: TXD (CHO-1 TXD Status) / RXD (CHO-1 RXD Status)
Insulation type		iCoupler (Analog devices)* ³
Hot swap		possible
Power supply		DC 24 V \pm 20% (The voltage supplied from the backplane)
Environmental conditions	Module ambient temperature	(Operating) -5 to 60°C (Storage) -40 to 85°C
	Module ambient humidity	(Operating / Storage) 10 to 95% RH (No condensation)
Vibration		3.5 mm @ 5 Hz to 8.4 Hz 1 G @ 8.4 Hz to 150 Hz
Shock		15 G 11 ms
Current consumption		Less than 150 mA
Weight		0.124 kg
Dimensions		97 mm (D) x 94 mm (H) x 46 mm (W) (Except projection)
Standard/Directive		EN 61131-2:2007, RoHS

About compliant module type

For compliant modules of this product, please refer to "Compliant backplane list (CGS-S9901-E-XX)".

For compliant modules of this product, please refer to "Compliant accessory connector list (CGS-S9902-E-XX)".

*¹ Depending on the system environment, adjustment such as slowing down the communication cycle is required.

*² To make this module redundant, use a single-correspondence backplane (LSIOB01/LSIOB01-2/LSIOB01-4).

It can be used as a redundant by installing two of this module, establishing two independent communication lines, and then selecting the data in the upper application logic.

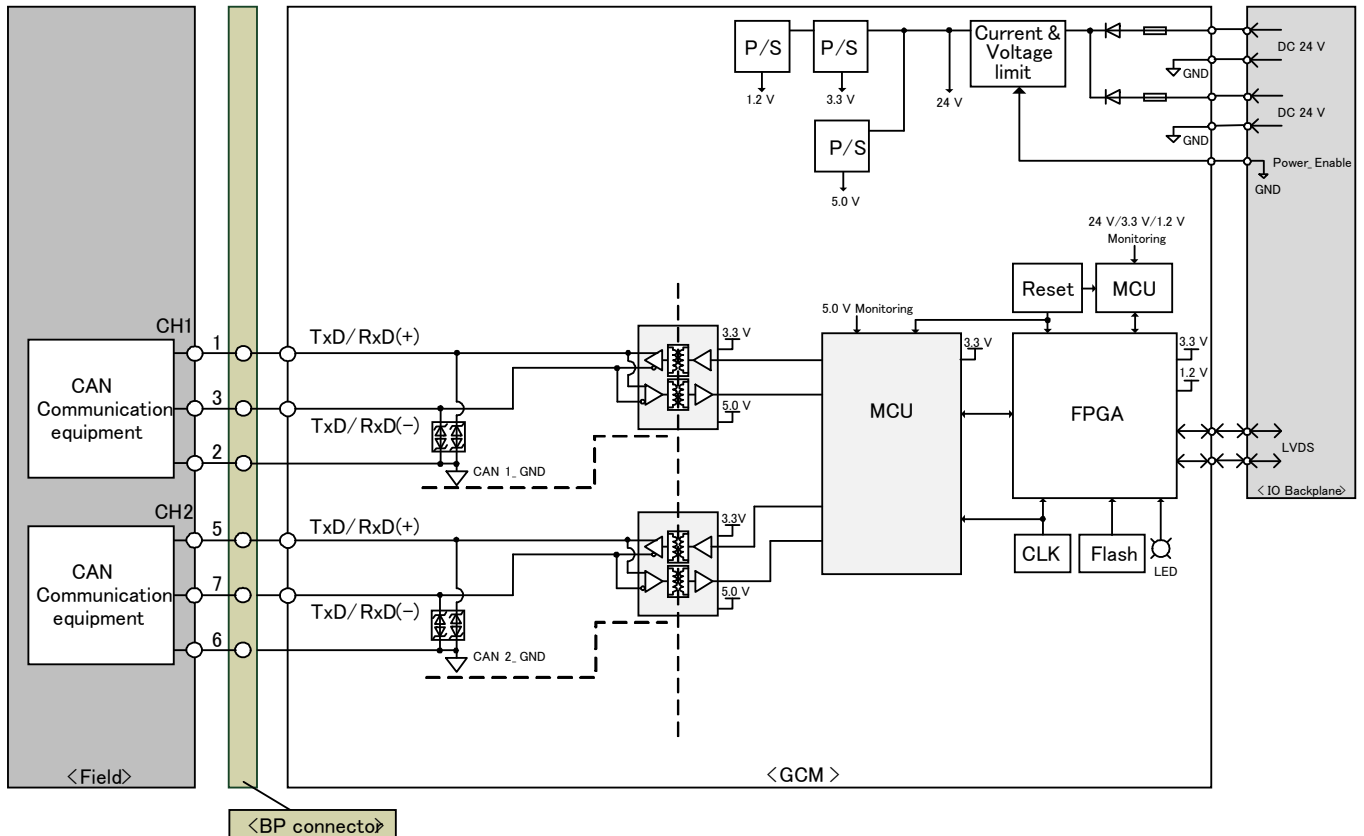
*³ iCoupler is an analog technology company's isolation technology.




By combining high-speed CMOS and monolithic air core transformer, it has excellent performance characteristics.

LSGCM05 CAN Communication module

LS communication CAN 2 ch

■ Block diagram



P/S	:	Power supply
CLK	:	Clock
FPGA	:	Field programmable gate array
LED	:	Light emitting diode
MCU	:	Micro control unit
GND	:	Ground
CANx_GND	:	Isolation ground
LVDS	:	Low Voltage Differential Signaling
BP	:	BackPlane
	:	fuse
	:	diode
	:	ESD protection diode

When using, please read the instruction manual attached to the product carefully and use it properly.

This catalog may not be distributed or reproduced in whole or in part without permission.

Please be aware that due to product improvements and modifications, the product description in this catalog may differ in certain respects from the actual product.

DIASYS Netmation/DIASYS Netmation4S is a registered trademark of Mitsubishi Heavy Industries, Ltd.

The service names and product names of other companies described in this catalog are the trademarks or registered trademarks of each company.