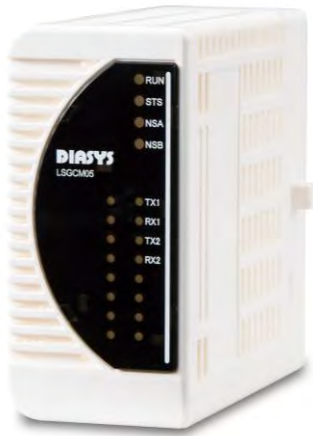


# LSGCM05 CAN Communication module

LS communication CAN 2ch

## ■ Summary



- \* Communication port : 2 (Individual isolation)
- \* Module ambient temperature : -5 to 60°C

# LSGCM05 CAN Communication module

LS communication CAN 2ch

## Specifications

ITEM		SPECIFICATION
Communication port	Number of channels	2 (Individual isolation)
	Communication speed	50K、125K、250K、500K、1Mbps *Compliant with ISO 11898 standard
	Communication size	Maximum transmit / receive total 16 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)
Terminating resistance		Required for external line connection terminal block side
Dielectric voltage		DC500V
Communication with IOA	Communication method	LVDS
	Communication speed	100Mbps
Self-diagnostic functions		Power voltage check (24V, 3.3V, 1.2V) 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(CH0-1 TXD Status) /RXD(CH0-1 RXD Status)
Insulation type		iCoupler(Analog devices)*2
Hot swap		possible
Power supply		DC24V ±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	Less than 95%RH (No condensation)
Vibration		3.5mm @ 5 Hz ~ 8.4 Hz 1G @ 8.4 Hz ~ 150 Hz
Shock		15G 11ms
Current consumption		Less than 150mA
Weight		0.124kg
Dimensions		97mmD x 94mmH x 46mmW (Except projection)
Standard/Directive		IEC61131-2-2007, 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.

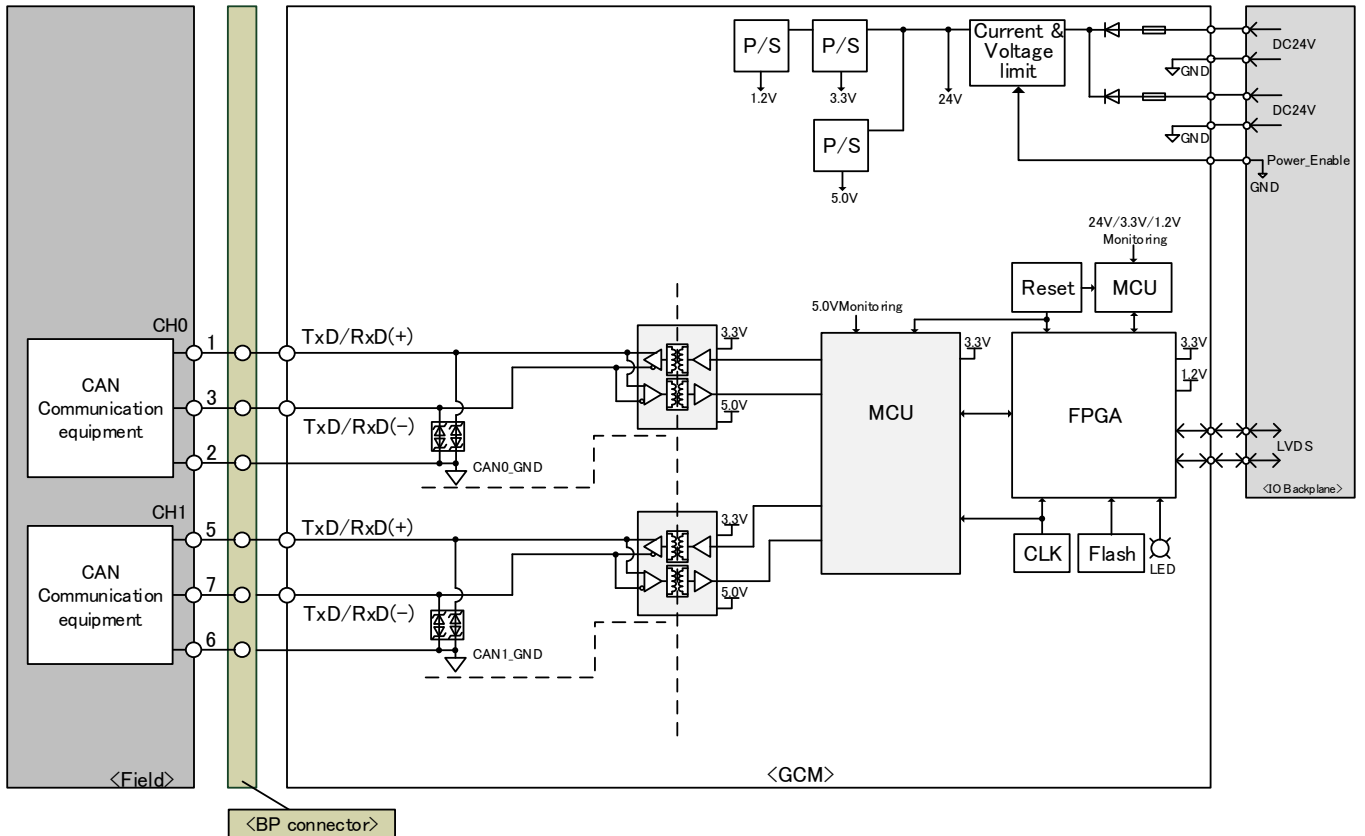
\*2 iCoupler is an analog technology company's isolation technology.




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

# LSGCM05 CAN Communication module

LS communication CAN 2ch

## ■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.

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