

LSDIM01 DI module

LS communication Digital inputs : 16 2count/pulse

■ Summary



* Number of inputs : 16 (16 ch common isolation)

* Module ambient temperature : -5 to 60°C

* Isolation : Digital isolation

* Count : 2 count/pulse

LSDIM01 DI module

LS communication Digital inputs : 16 2count/pulse

■ Specifications

ITEM		SPECIFICATION	
Input	Number of channels	16 (16 ch common isolation)	
	Range	ON current	2 mA or more *Selectable power for sense current: +24 V/-24 V/+48 V/-48 V
		OFF current	1.0 mA or less
		Disconnection	Setting disconnection detection ON: 0.5 mA or less
Data refresh cycle		0.3 ms/All channels	
Input filter		Software digital filter (Channel individual)	
Dielectric strength		AC 1500 V Between input terminal and PE	
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 check (FPGA-MCU for diagnosis, MCU for diagnosis -FPGA) Heartbeat check (FPGA-MCU, FPGA-MCU for diagnosis, MCU for diagnosis -FPGA) CRC check (FPGA) Sense voltage/current check (MCU) MCU power check (MCU)	
Event DI function(EDI)		Event DI module: 16 Event signal input: Settable by software (EMS) Time resolution: 1 msec	
Pulse input function(PI)		Pulse input module: 16 Input pulse rate: 0 to 500 Hz (Both ON, OFF times shall be 0.5 msec or longer.) Count: OFF → ON, ON → OFF (2count/pulse)	
Detective		Disconnection detection	
Protection	IO circuit Protection	Overvoltage protection	
	Power supply Protection	Overcurrent protection	
Indicator	Display LED	4: RUN(Run) / STS(Status) / NSA(Network status A) / NSB(Network status B)	
	Channel status LED	16: Each I/O channels status	
Isolation		Digital isolation	
Hot swap		Possible	
Power supply		DC 24 V ±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 to 8.4 Hz 1 G @8.4 to 150 Hz	
Shock		15 G 11 ms	
Rated Current		164 mA	
Weight		0.10 kg	
Dimensions		62 mm (D) x 94 mm (H) x 46 mm (W) (Except projection)	
Standard/Directive		EN 61131-2:2007, RoHS	

About compliant module type

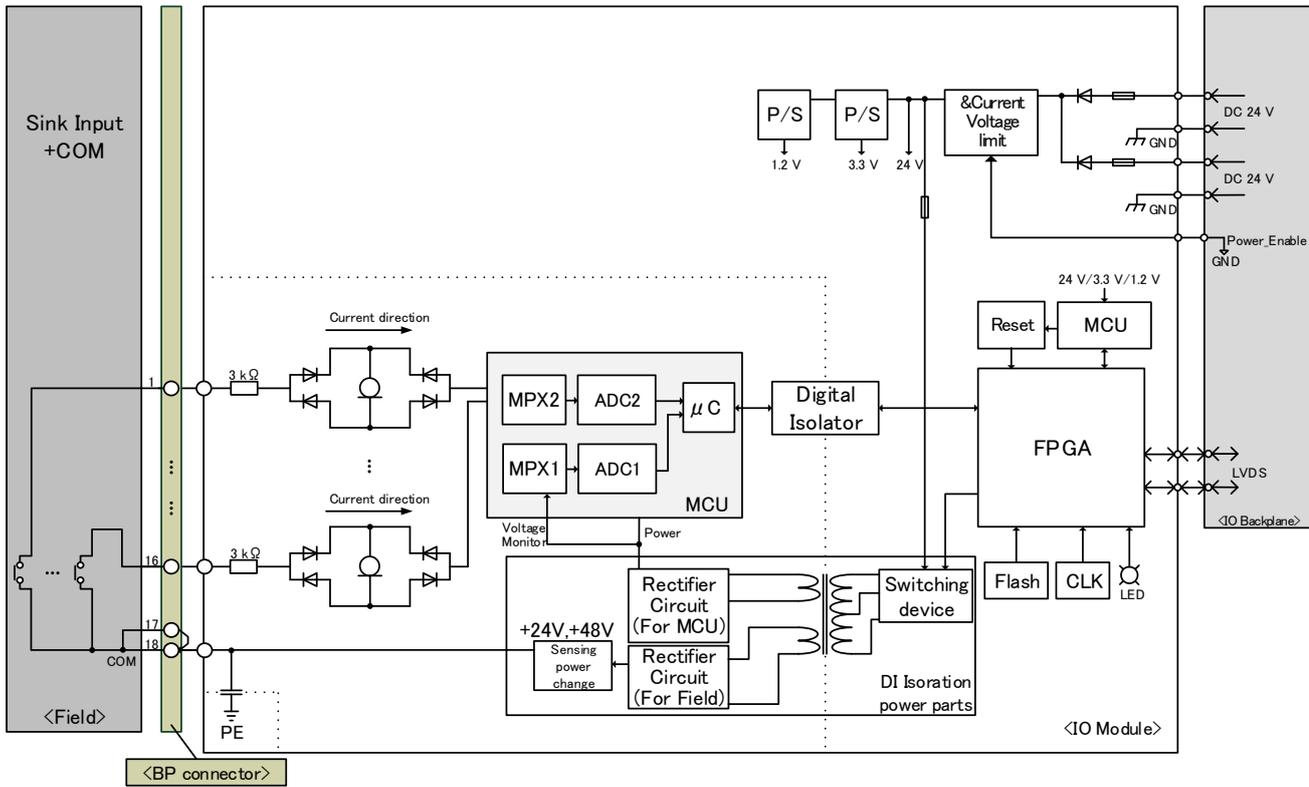
For compliant backplanes of this product, please refer to “Compliant backplane list (CGS-S9901-E-XX)”.

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

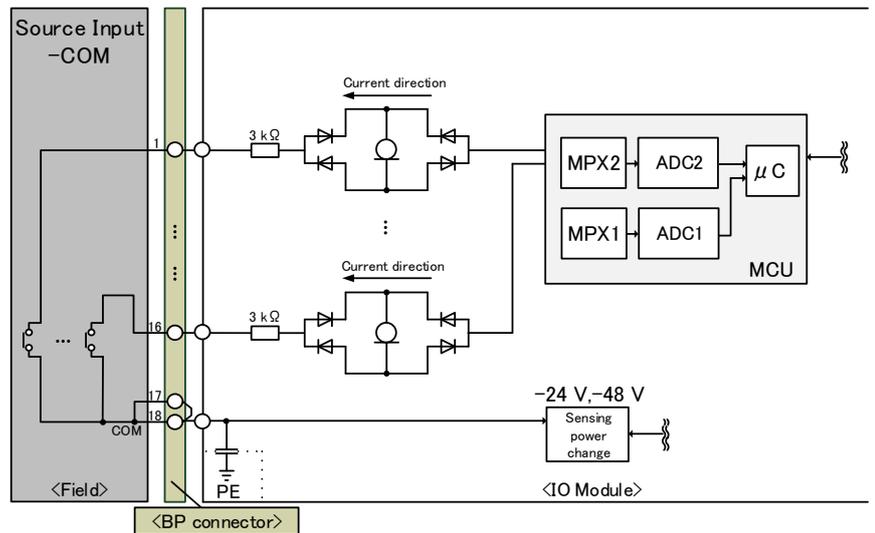
LSDIM01 DI module

LS communication Digital inputs : 16 2count/pulse

Block diagram



- P/S : Power supply
- MPX : Multiplexer
- ADC : Analog digital converter
- μC : Micro controller
- CLK : Clock
- FPGA : Field programmable gate array
- LED : Light emitting diode
- MCU : Micro control unit
- GND : Ground
- COM : Common
- IOA : I/O adapter
- LVDS : Low Voltage Differential Signaling
- EMS : Engineering Management System
- BP : Backplane
- PE : Protective Earth
-  : Resistor
-  : Fuse
-  : Diode
-  : Capacitor
-  : Switch
-  : Transformer
-  : Constant current circuit



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.