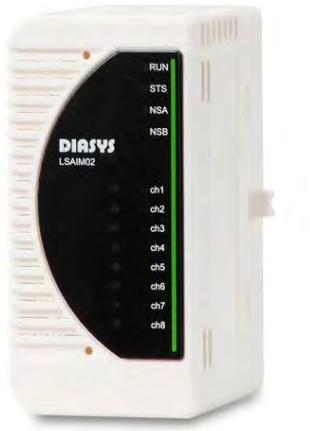
LSAIM02 AI module

LS communication Transmitter inputs : 8 4～20mA

■Summary



＊Number of inputs	:	8 / Transmitter input, DC24V distributed type (Channel individual isolation)
＊Input range	:	4 to 20mA
＊Absolute precision	:	±0.1%F.S. @25°C
＊Including temperature drift	:	Less than ±100ppm/°C
＊Module ambient temperature	:	-5 to 60°C
＊Insulation method	:	Transformer insulation

LSAIM02 AI module

LS communication Transmitter inputs : 8 4～20mA

■Specifications

ITEM		SPECIFICATION
Input	Number of channels	8 (Transmitter input, DC24V distributed type, Individual isolation)
	Range	4 to 20mA(Full Scale)
	Resolution	16bits
Absolute precision	@25℃	±0.1%F.S.
Temperature drift	@-5～60℃	Less than ±100ppm/°C(relative to full-scale)
CMRR		100dB or more attenuation
NMRR		About 2dB attenuation (When the first-order lag filter is set to 30ms or more, attenuation by 20dB or more)
Data refresh cycle		5ms /All channels
Input filter		Software digital filter (Channel individual)
Dielectric strength		AC500V input terminal - between PE Between input channels
Communication with IOA	Communicaton method	LVDS
	Communication speed	100Mbps
HART communication compliant Between actuators Communication specification	Communicaton method	HART communication (superimposed on 4 to 20mA signal)
	Communication speed	1200bps
Self-diagnostic functions		Power voltage check (24V, 3.3V, 1.2V) 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) AI communication error check Tuning check
Detective		ADC abnormal check I/O signal range check (Overrange , Underrange)
When disconnected		Detect underrange
Protection	(Power supply Protection)	Overvoltage protection Overcurrent protection
Indicator	Display LED	4 : RUN(Run) / STS(Status) /NSA(Network status A) / NSB(Network status B)
Insulation method		Transformer insulation
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 to 8.4Hz 1G @8.4 to 150Hz
Shock		15G 11ms
Current consumption		Less than 351mA
Weight		0.11kg
Dimensions		62mmD x 94mmH x 46mmW (Except projection)
Standard/Directive		IEC61131-2 : 2007, RoHS

*About compliant module type

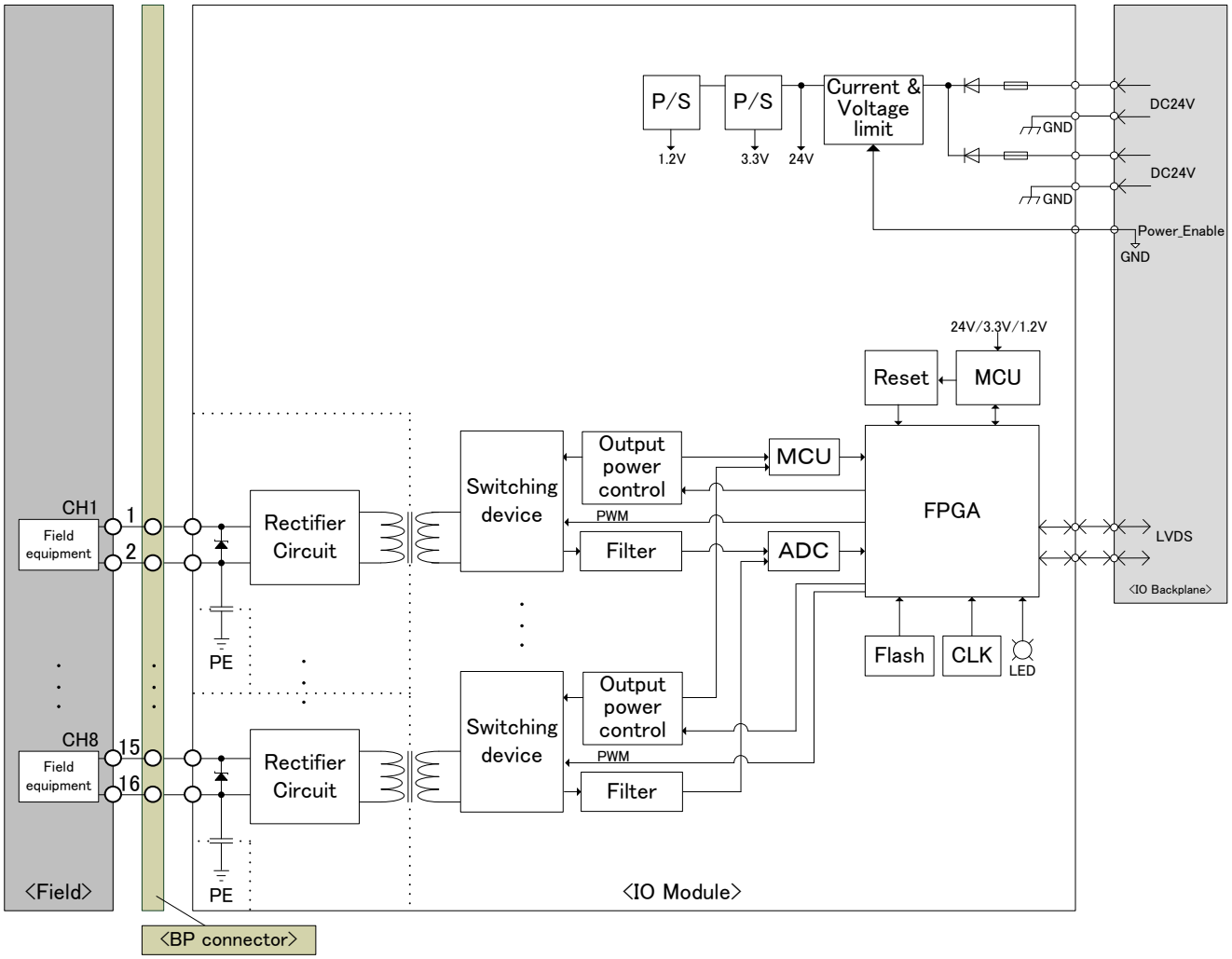
For compliant modules of this product, please refer to " Compliant backplane list (CGS-S9901-E-XX) ".

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

LSAIM02 AI module

LS communication Transmitter inputs : 8 4～20mA

■Block diagram



P/S	:	Power supply
PWM	:	Pulse width modulation
ADC	:	Analog digital converter
CLK	:	Clock
FPGA	:	Field programmable gate array
MCU	:	Micro control unit
GND	:	Ground
IOA	:	I/O adapter
LVDS	:	Low Voltage Differential Signaling
BP	:	Backplane
PE	:	Protective Earth
	:	Zener diode
	:	Fuse
	:	Diode
	:	Capacitor
	:	Transformer

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