

LSAOM01-2 AO module

LS communication Analog outputs : 8 4 to 20 mA/0 to 20 mA

■ Summary



- * Number of outputs : 8 (Channel individual isolation)
- * Output range : 4 to 20 mA/0 to 20 mA (Selectable)
- * Resolution : 16 bits
- * Module ambient temperature : -5 to 60°C
- * Isolation : Trans isolation

LSAOM01-2 AO module

LS communication Analog outputs : 8 4 to 20 mA/0 to 20 mA

■ Specifications

| ITEM | | SPECIFICATION |
|--|---|--|
| Output | Number of channels | 8 (Channel individual isolation) |
| | Range | 4 to 20 mA/0 to 20 mA (Switchable by EMS setting) (Full Scale) |
| | Resolution | 16 bits |
| | Minimum external impedance | 24.9 Ω |
| | Maximum external impedance | 750 Ω |
| | Switching time of the redundant configuration | 2 ms |
| Data refresh cycle | | 5 ms /All channels |
| Operation cycle usable in DPS | | 10 msec or more |
| Absolute accuracy | @25°C | ±0.1% FS |
| Temperature drift | @5 to 60°C | Less than ±100 ppm/°C (relative to full-scale) |
| Input filter | | Software digital filter (Channel individual) |
| Dielectric strength | | AC 500 V input terminal – between PE Between input channels |
| Communication with IOA | Communication method | LVDS |
| | Communication speed | 100 Mbps |
| HART communication compliant Between actuators Communication specification | Communication method | HART communication (superimposed on 4 to 20 mA signal) |
| | Communication speed | 1200 bps |
| Self-diagnostic functions | | Power voltage check (24 V, 3.3 V, 2.5 V, 1.8 V, 1.0 V) Clock check (FPGA-MCU for diagnosis, MCU for diagnosis -FPGA) Read-back error check (Presence or absence can be set by configuration) CRC check (FPGA) Tuning check ADC abnormal check |
| Detective | | I/O signal range check (Range over, Range under) Disconnection detection (Settable of possible/none by the configuration) |
| 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 | | 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) Less than 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 |
| Current consumption | | 299 mA |
| Weight | | 0.13kg |
| 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

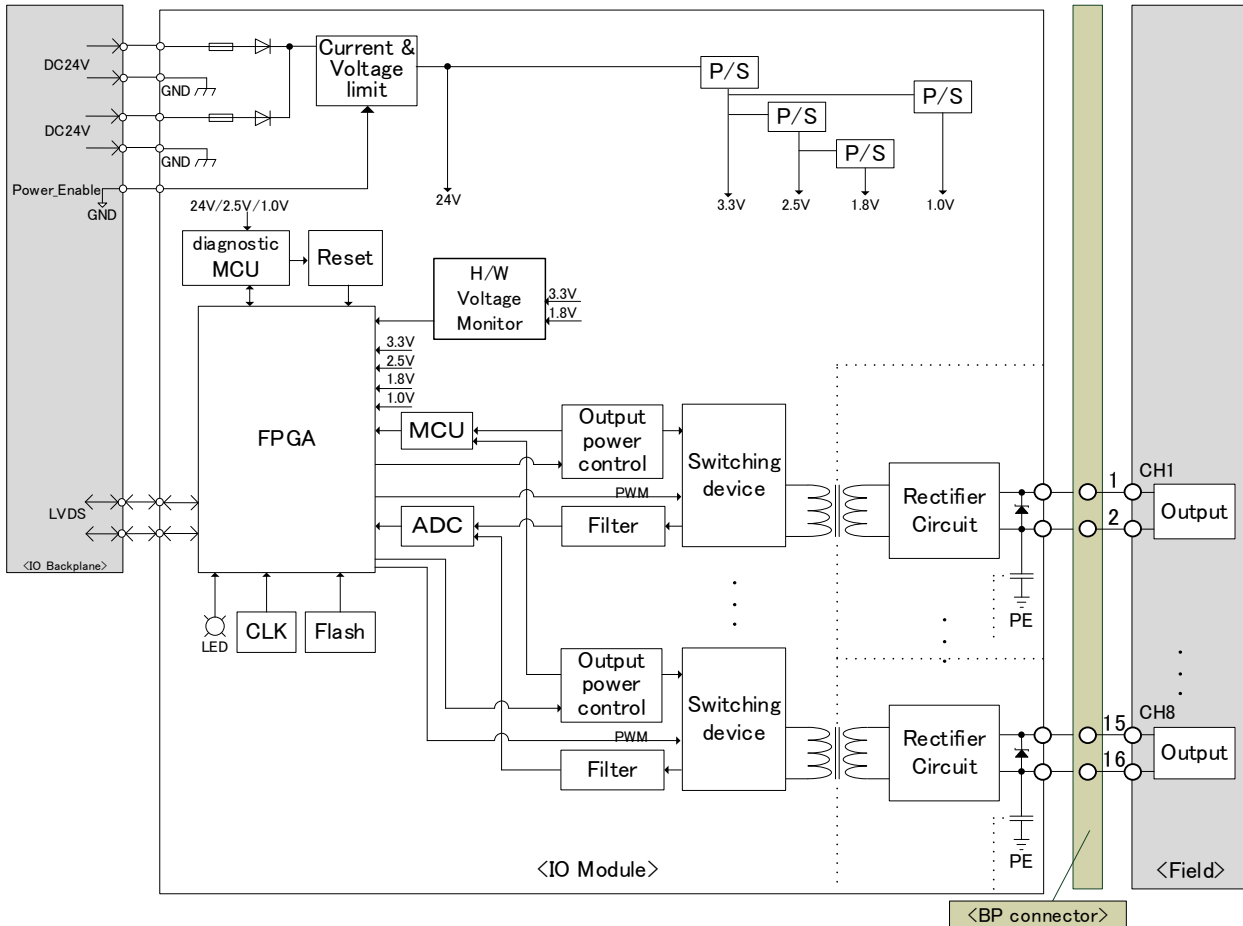
For compliant modules of this product, please refer to “Compliant backplane list (CGS-S9901-E-XX)”.






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

LSAOM01-2 AO module

LS communication Analog outputs : 8 4 to 20 mA/0 to 20 mA

Block diagram



| | | |
|---|---|------------------------------------|
| P/S | : | Power supply |
| PWM | : | Pulse width modulation |
| ADC | : | Analog digital converter |
| CLK | : | Clock |
| FPGA | : | Field programmable gate array |
| LED | : | Light emitting diode |
| 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.

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.