

Videographic recorder LIM-141

Technical description

Characteristic

- videographic recorder
- LCD 5,7" touchscreen
- I/O wide range of modules
- up to 72 analog / digital inputs
- up to 90 virtual channels
- sampling frequency from 0,1 s
- IP65 protection degree
- 1,5 GB internal storage
- interfaces: Ethernet, USB Host, RS485 (MultiModbus)
- keyboard and mouse support
- PID, profiles/timers
- mathematical functions: derivative, integral, pulse counter, flip-flop, medium
- DAQ Manager software

Input modules

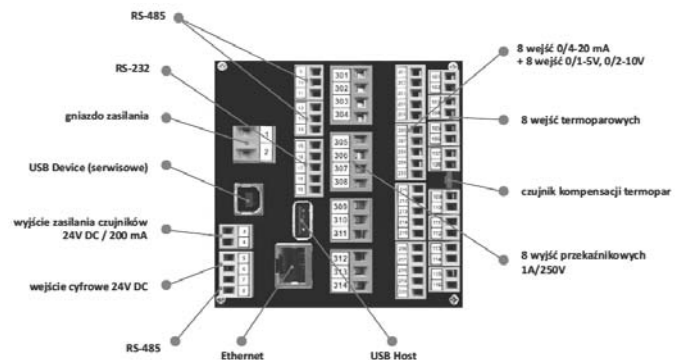
- max. 72 analog inputs:
(0 ÷ 20) mA, (4 ÷ 20) mA,
(0 ÷ 5) V, (1 ÷ 5) V, (0 ÷ 10) V, (2 ÷ 10) V
- max. 72 digital inputs
- max. 36 TC inputs:
J, K, S, T, N, R, B, E (PN-EN), L (GOST),
±25 mV, ±100 mV, (-10 ÷ 25) mV, (-10 ÷ 100) mV
- max. 18 RTD inputs (2-, 3- and 4- wires):
Pt100, Pt500, Pt1000 (PN-EN),
Pt'50, Pt'100, Pt'500 (GOST),
Ni100, Ni500, Ni1000 (PN-EN),
Cu50, Cu100 (PN-83M-53852),
Cu'50, Cu'100 (PN-83M-53852),
resistive (0 ÷ 300) Ω, resistive (0 ÷ 3) kΩ,
- max. 12 counting/flow meter/tachometer inputs:
(0 ÷ 20) (1/s), (0 ÷ 20) (1/min.), (0 ÷ 20) (1/hour.),
(4 ÷ 20) (1/s), (4 ÷ 20) (1/min.), (4 ÷ 20) (1/hour.),
- max. 15 universal inputs:
(0 ÷ 20) mA, (4 ÷ 20) mA,
(0 ÷ 5) V, (1 ÷ 5) V, (0 ÷ 10) V, (2 ÷ 10) V
thermocouples: J, K, S, T, N, R, B, E (PN-EN), L (GOST),
(-10 ÷ 25) mV, (-10 ÷ 100) mV, (0 ÷ 600) mV,
Pt100, Pt500, Pt1000 (PN-EN),
Pt'50, Pt'100, Pt'500 (GOST),
Ni100, Ni500, Ni1000 (PN-EN),
Cu50, Cu100 (PN-83M-53852),
Cu'50, Cu'100 (PN-83M-53852),
resistive (0 ÷ 300) Ω, resistive (0 ÷ 3) kΩ,
- mixed inputs: NTC analog-to-temperature
max. 24x (0 ÷ 20) mA, (4 ÷ 20) mA and
max. 24x (0 ÷ 5) V, (1 ÷ 5) V, (0 ÷ 10) V, (2 ÷ 10) V and
max. 24x NTC,
- mixed inputs: analog-to-digital
max. 24x (0 ÷ 20) mA, (4 ÷ 20) mA and
max. 24x (0 ÷ 5) V, (1 ÷ 5) V, (0 ÷ 10) V, (2 ÷ 10) V and
max. 24x digital,
- 1 digital input 24 V DC with optoisolation (integrated
with power module)

Output modules

- max. 24 analog:
(4 ÷ 20) mA (hardware limitation (3 ÷ 22) mA)
- 36 relays 1 A/250 V
- 18 relays 5 A/250 V
- 72 SSR
- sensor power output: 24 V DC ±5% (max. 200 mA for current
inputs)



LIM-141 recorder configuration example
rear view:



Communication modules

- Ethernet
- RS485 (multi Modbus)
- USB Host

Power source

(85 ÷ 260) V AC/DC
(19 ÷ 50) V DC, (16 ÷ 35) V AC

Power consumption

typically 25 VA, max. 35 VA

Operating conditions

(0 ÷ 50) °C (standard)
(-20 ÷ 50) °C (optional)

Dimensions [mm]

144x144x100
mounting hole dimensions: 137x137
mounting depth: min. 102

| Type | Specification |
|-------|---|
| 0 | without I / O module in the given slot |
| UN3 | 3 universal inputs U//RTD/TC/mV, isolated |
| UN5 | 5 universal inputs U//RTD/TC/mV, isolated |
| I16 | 16 current inputs |
| I24 | 24 current inputs |
| IS6 | 6 current inputs, isolated |
| U16 | 16 voltage inputs |
| U24 | 24 voltage inputs |
| UI4 | 4 voltage inputs + 4 current inputs |
| UI8 | 8 voltage inputs + 8 current inputs |
| UI12 | 12 voltage inputs + 12 current inputs |
| UI4N8 | 4 voltage inputs + 4 current inputs + 8 NTC inputs |
| UI4D8 | 4 voltage inputs + 4 current inputs + 8 digital inputs |
| UI8N8 | 8 voltage inputs + 8 current inputs + 8 NTC inputs |
| UI8D8 | 8 voltage inputs + 8 current inputs + 8 digital inputs |
| CP2 | 2 pulse inputs, universal counters, isolated |
| CP4 | 4 pulse inputs, universal counters, isolated |
| HM2 | 2 time counter inputs, isolated |
| HM4 | 4 time counter inputs, isolated |
| FT2 | 2 pulse tachometer / flowmeter inputs, isolated + 2 standard current inputs |
| FT4 | 4 pulse tachometer / flowmeter inputs, isolated + 4 standard current inputs |
| FI2 | 2 analog tachometer / flowmeter inputs + 2 standard current inputs |
| FI4 | 4 analog tachometer / flowmeter inputs + 4 standard current inputs |

| Type | Specification |
|------|---------------------------------|
| RT4 | 4 RTD inputs |
| RT6 | 6 RTD inputs |
| TC4 | 4 thermocouple inputs |
| TC8 | 8 thermocouple inputs |
| TC12 | 12 thermocouple inputs |
| D8 | 8 digital inputs, isolated |
| D16 | 16 digital inputs, isolated |
| D24 | 24 digital inputs, isolated |
| R81 | 8 relay outputs 1A |
| R121 | 12 relay outputs 1A |
| R45 | 4 relay outputs 5A |
| R65 | 6 relay outputs 5A |
| S8 | 8 SSR outputs |
| S16 | 16 SSR outputs |
| S24 | 24 SSR outputs |
| IO2 | 2 outputs (4 ÷ 20) mA, isolated |
| IO4 | 4 outputs (4 ÷ 20) mA, isolated |
| IO6 | 6 outputs (4 ÷ 20) mA, isolated |
| IO8 | 8 outputs (4 ÷ 20) mA, isolated |

Ordering code

| Videographic recorder | LIM-141 - ... - ... - ... - ... - ... |
|--|---------------------------------------|
| Power source: (85 ÷ 260) V AC/DC (19 ÷ 50) V DC, (16 ÷ 35) V AC | 4 5 |
| Interface: standard (1x USB on the front / rear panel) extended (1x USB, 1x Ethernet) extended (1x USB, 1x Ethernet 1x RS485, 1x RS232) | 1 2 3 |
| C slot: I/O modules | acc. to table |
| B slot: I/O modules | acc. to table |
| A slot: I/O modules | acc. to table |
| Options: none | 00 |
| IP65 frame | 01 |
| operating temperature: (-20 ÷ 50) °C | 08 |
| USB Host on the front panel (IP40) | 0B |
| IP65 + operating temp.: (-20 ÷ 50) °C | 0P |

Ordering example

Videographic recorder LIM-141-4-1-UN5-UN5-0-0B