

SMART CONTROLLER

Programmable Automation Controller



LS-5821


Programmable Automation Controller



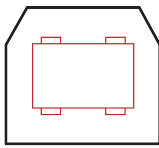
- Linux Operation System
- Supports IEC 61131-3
- Industrial Gateway
- Multi Interface
- Multi Protocol supports
- Digital and Analog Inputs
- 24 VDC Supply

The **LS-5821** is an easy and cost-effective product for the implementation of industrial automation. Not only does it support all network and CANbus interfaces, but also digital and analog inputs. It features two channels, and each channel supports digital inputs with a dry contact type cover of 24 to 36 VDC (ON), and 0 to 12 VDC (OFF) voltage. On the other hand, voltage and current are offered as analog inputs. A powerful ARM® Cortex®-A8 CPU and real-time Linux operating system provides maximum reliability and security for data management and monitoring. It also contains 1GB DDR3 RAM, 128 KB EEPROM, 4GB micro-SD and 16GB EMCC. Moreover, it has a watch-dog timer to overcome software failures, and wake up the microcontroller from sleep mode. The **LS-5821** is equipped with many features and communication interfaces, including 2 Ethernet, 2 USB, Micro HDMI, eMMC, SD-Card, RS485/RS422, RS232, and CAN open. Supporting various protocols, including MODBUS RTU, MODBUS TCP, OPC-UA and IEC 60870-5-104, this makes it a flexible industrial gateway for different applications.


Product Features




**mini
HDMI**




USB Type B




USB Type A



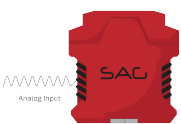
Ethernet




micro
SD




OPC UA



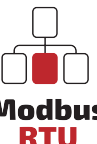
SAC
Analog Input




SAC
Digital Input




Linux




Modbus
RTU



CODESYS

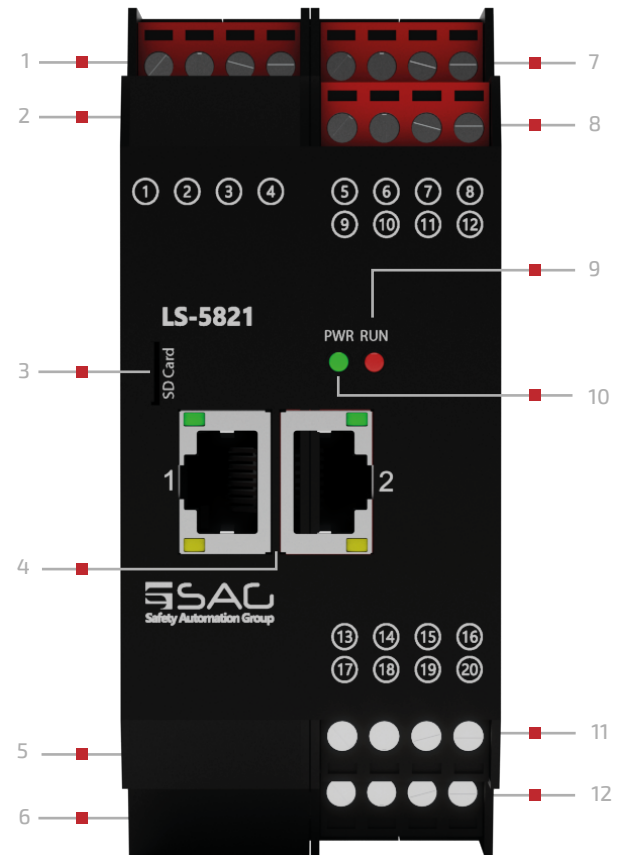


CANopen



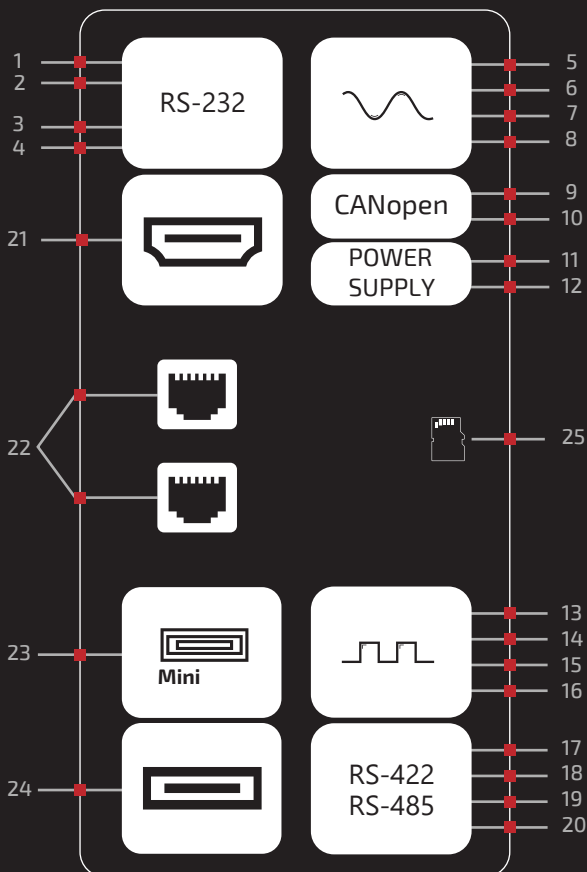
IEC
60870-5-104

Front View



1. RS-232 Interface
2. Micro HDMI
3. SD Card Slot
4. Ethernet
5. Mini USB(Type B)
6. USB Type A
7. Analog Input 1,2
8. Power Supply/ CANopen Interface
9. RUN LED
10. Power LED
11. Digital Input 1,2
12. RS-422/485 Interface

Connection View



- | | |
|--------------------|---------------------|
| 1. RX | 9. CAN + |
| 2. TX COM | 10. CAN - |
| 3. GND Serial | 11. GND |
| 4. GND | 12. +24VDC |
| 5. Analog Input.1- | 13. Digital Input.1 |
| 6. Analog Input.1+ | 14. COM |
| 7. Analog Input.2+ | 15. Digital Input.2 |
| 8. Analog Input.2- | 16. COM |
| | 17. RS-485 B- |
| | 18. RS-485 A+ |
| | 19. RS-422 Y+ |
| | 20. RS-422 Z- |
| | 21. Micro HDMI |
| | 22. Ethernet |
| | 23. Mini-USB B |
| | 24. USB A |
| | 25. RD+ |

TECHNICAL DATA

LS-5821

Software

OS	Linux Debian
Protocols	<ul style="list-style-type: none"> • Modbus RTU Master/Slave • Modbus TCP Server/Client • IEC-104 • CANopen • OPC UA
Development	IEC 61131-3 (Codesys)
Main Unit	
CPU	ARM® Cortex®-A8 up to 1GHz
RAM	1GB DDR3
Storage	128 KB EEPROM, 4GB micro SD, 16GB EMCC
Watchdog Timer	Yes
I/O	
Digital Input	2 Channels
Type	Dry Contact
Voltage Level	ON: +24 ~ +36 VDC OFF: 0 ~ +12 VDC
Connection	Terminals 13, 14 and 15, 16
Analog Input	2 Channels
Voltage & Current Input	±150 mV, ±500 mV, ±1V, ±5 V, ±10 V, ±20 mA, 0 ~ 20 mA, 4 ~ 20 mA
Connection	Terminals 5-, 6+ and 7+, 8-
Display	
Signal	Micro HDMI
Resolution	640 / 480, 800 / 480, 800 / 600, 1024 / 768
COM Ports	
Ports	1 / RS-232, 1 / RS-422/485
Connection	RS-232: terminals 1(RX), 2(TX), 3(GND), 4(GND) RS-422: terminals 17(B-), 18(A+), 19(Y+), 20(Z-)
Ethernet	
Ports	2 x RJ-45, 10/100/1000 Base-TX (Auto-negotiating, Auto MDI/MDI-X, LED indicators)
USB	
Ports	1 x USB type A, 1 x mini USB type B
CANopen	
Ports	1 x CANopen
Connection	Terminals 9(CAN +), 10(CAN -)

Smart Controller - PAC

TECHNICAL DATA

LS-5821

Environmental Conditions

Operation Temperature Temperature limits -20 to +60 °C

Supply

Rated voltage 24 VDC nom (20-30 VDC) reverse polarity protected

Connection Terminal 11(+24VDC), Terminal 12(GND)

Mounting

Mounting on 35 mm DIN mounting rail acc. to EN 60715:2001

ORDERING INFORMATION

LS-5821

LS:

Linux SAG

58:

AM3358

2:

2 x Ethernet

1:

1 x Codesys

ORDERING INFORMATION

LS-5821

SAG Programmable Automation Controller - Linux base



www.sagco.ca

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