



# i/o SCOUT SMART DATA LOGGER (SDL1.0)

## The i/o SCOUT SDL1.0

is a versatile and programmable datalogger built for real-time data acquisition and automation. With support for GSM and Wi-Fi, it enables remote monitoring and data collection, ideal for applications in agriculture, environmental monitoring, and industrial settings

### KEY FEATURES

<b>Controller Type</b>	Programmable
<b>Memory Storage</b>	32GB internal, expandable with Micro SD
<b>Wireless Communication</b>	Wi-Fi (802.11 B/G/N) and GSM (LTE CAT-M1, NB-IoT)
<b>I/O Interfaces</b>	2x DI, 2x DO, 1x AI, 1x RS485 (Modbus RTU), 1x Micro USB, 1x Mini-PCle (for GSM module)
<b>Indicators</b>	Power LED (Green), Network LED (Green)
<b>Configurator Tool</b>	i/o SCOUT Configurator Tool for setup and calibration
<b>Mounting Options</b>	Wall mount or DIN rail
<b>Enclosure</b>	Aluminum



### TECHNICAL SPECIFICATIONS

<b>Model</b>	SDL1.0
<b>Storage</b>	32GB internal, Micro SD slot
<b>SIM Slot</b>	1x SIM (for GSM)
<b>Real-Time Clock</b>	Yes
<b>Expansion Support</b>	Yes
<b>Wireless Communication</b>	Wi-Fi (802.11 B/G/N), GSM (LTE CAT-M1, NB-IoT)
<b>GPIO Interface</b>	2x Digital Input (0-12V), 2x Digital Output (0-3.3V)
<b>Analog Input</b>	1x (0-10V, 16-bit resolution)
<b>Serial Port</b>	1x RS485 (Modbus RTU)
<b>USB Port</b>	1x Micro USB

<b>Mini-PCle Slot</b>	Supports GSM module
<b>Power Requirement</b>	12-24V DC
<b>Power Consumption</b>	4-8.4W
<b>Power Connector</b>	2-Pin Terminal Block

### MECHANICAL PROPERTIES

<b>Dimensions</b>	46 x 119 x 106 mm
<b>Form Factor</b>	Small size, aluminum enclosure
<b>Mounting Options</b>	Wall-mount, DIN rail
<b>Weight</b>	500g

### ENVIRONMENTAL SPECIFICATIONS

<b>Operating Temperature</b>	-10... +70° C (14...158 °F)
<b>Ingress Protection</b>	IP63

### PERIPHERALS

<b>Micro USB Port</b>	1x Micro USB for configuration
<b>SIM Slot</b>	1x SIM slot for GSM connectivity
<b>Mini-PCle Slot</b>	Slot for GSM module



# i/o SCOUT SMART DATA LOGGER (SDL1.0)

## The i/o SCOUT SDL1.0

is a versatile and

programmable

datalogger built for real-

time data acquisition and

automation. With support

for GSM and Wi-Fi, it

enables remote

monitoring and data

collection, ideal for

applications in

agriculture,

environmental

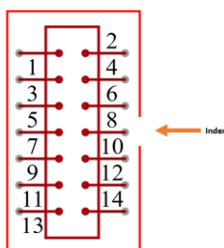
monitoring, and

industrial settings

## INPUTS & OUTPUTS

<b>Digital Inputs (DI)</b>	2 channels, 0-12V range
<b>Digital Outputs (DO)</b>	2 channels, 0-3.3V output
<b>Analog Input (AI)</b>	1 channel, 0-10V range, 16-bit resolution
<b>RS485 Modbus RTU</b>	1x RS485 serial port for Modbus communication

## EXPANSION PORT



Pin	Connection
1	RX
2	TX
3	SCL
4	SDA
5,6,7,8	NOT CONNECTED
9	5V
10	GND
11,12,13,14	NOT CONNECTED

## APPLICATION NOTES

<b>Power Supply</b>	Connect a regulated 12-24V DC source; ensure polarity and secure connections.
<b>Communication</b>	Insert SIM card and connect antennas for Wi-Fi/GSM setup using the Configurator Tool.
<b>Maintenance</b>	Inspect wiring and connections periodically; update firmware as needed; clean device exterior with a dry cloth.
<b>Warranty</b>	One-year limited warranty covering defects in material or workmanship.
<b>Customer Support</b>	For assistance, contact: support@io-scout.com

## COMMUNICATION CHANNELS

<b>Wi-Fi</b>	802.11 B/G/N
<b>GSM</b>	LTE CAT-M1, NB-IoT
<b>RS485 Modbus RTU</b>	Serial communication for Modbus-compatible devices

## FUNCTIONAL DESCRIPTION

<b>Data Collection</b>	Collects data through digital, analog inputs and RS485 Modbus RTU, processes it, and transmits data remotely via GSM or Wi-Fi.
<b>Remote Monitoring</b>	Enables real-time data access and visualization through cloud connectivity.
<b>Local Configuration</b>	Configurable through Micro USB and i/o SCOUT Configurator Tool for I/O calibration, network setup, etc.



**Progressive Impact Corporation Bhd**  
Suite 5.02, Mercu PICORP  
Lot 10, Jalan Astaka U8/84,  
Bukit Jelutong Business & Technology Center  
40150 Shah Alam, Selangor, Malaysia

Product Support Services  
Email: support@io-scout.com

Web: www.io-scout.com

As standards, specifications, and design change from time to time, Please ask for confirmation of the information given in this publication.

2024, Progressive Impact Corporation.  
All rights reserved

**Doc : RD-23-C-002-07-02 Rev: 0**