Product Specification Report

Supplier Name：	IGEN Tech Co., Ltd.
Supplier Part No.：	
Customer Name：	
Customer Part No.：	
Product Name：	Stick Logger (Ethernet)
Product Type：	LSE-3
Web Version：	
WiFi Version (Firmware Version)：	
Inverter Type：	
Inverter Protocol：	
Effective Date：	
Customer Approval	Supplier Approval

Confirmed By	Approved By	

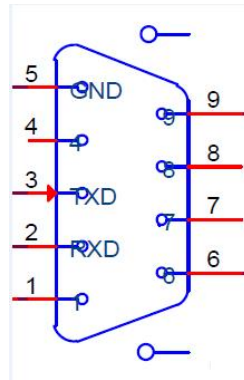| Version	Note	Updated Time	Updated By
1.0			

Introduction

By collecting operating data and power generation of inverter, stick logger (Ethernet) can run a long-term and efficient monitoring of PV system.

Logger can connect to single inverter via multi-type interfaces, which enables to collect all the data of PV system from the inverter. Meanwhile, remote monitoring cloud platform (SOLARMAN Portal) provides powerful data support for the logger. Logger sends the data to the monitoring platform via Ethernet. The real-time status and historical data can be displayed with graphs, enabling intuitive and clear understanding of PV system. Furthermore, customized alerts can notify users of any malfunction or defect immediately via SMS and e-mails, which realizes the management of PV system at anytime and anywhere, also simplifies the maintenance significantly.
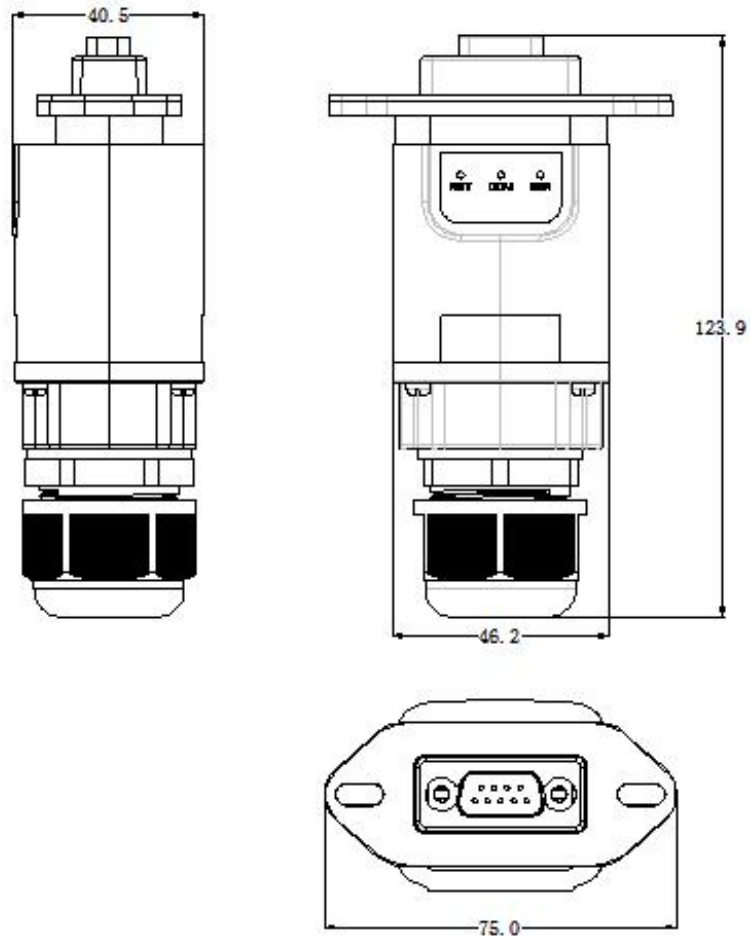
Product Parameter

Catalog	Parameter	Value
Hardware Parameter	Data Interface	RS232
	Remote COM Interface	LAN
	Working Voltage	DC 5V-DC12V
	Max. Working Voltage	DC 15V
	Max. Working Power	1W
	Indicator Light	One connect to inverter
		One connect to server
		One shows logger status
	Data Storage	2MBYTE FLASH
	Working Temperature	-30℃~+70℃
	Working Humidity	＜90% (No Condensation)
	Storage Temperature	-45℃~+90℃
	Storage Humidity	<40%
	External Interface	DB9
Software Parameter	No. of Connections	One
	Serial Communication Rate	9600bps（1200-115200bps Configurable)
	Data Transmission Interval	Default: 5 mins (1-15 mins Configurable)
	Configuration	AT+Instruction Set
		Remote Server
	Firmware Upgrade	Remote Upgrade
	Others	Real-time control, data-resuming

Interface Identification

Pin	Description	Network Name	Type	Detail
2	Receiving data	RXD	I	RS232 receiving (RS485_B line, TTL_RX)
3	Sending data	TXD	O	RS232 sending (RS485_A line, TTL_TX)
1、4、6、7、8	Not used	NC		Not used
5	Power GND	GND	Power	External Power： GND
9	Power VCC	DC_VIN	Power	External Power： DC 5V-12V (at least 1W supply)

Product Size (Unit：mm/Accuracy:±2%)

40.5

123.9

46.2

75.0

Product Picture

SN:1903520003
Ethernet

Front View

Back View

Side View

LED Indicator Lights Instructions

After logger connected to the device, check the status of NET light, COM light, SER light and whether there are data on the platform.

(There is only one light for each NET, COM and SER light.)

The normal operation status after the stick logger powered on:

1. Initializing: SER light extinguishes after the stick logger powered on;
2. Fail to connect to server: NET light flashes around 2s (On 6s/Off 6s);
   Connect to server: NET light flashes (On 1s/Off 1s);
3. Successful communication with inverter: COM light keeps on around 5s.

Light	Implication	Instruction
NET	Logger network status	1.Off: Fail to connect to network; 2.On: Connect to network.
COM	Communication status with inverter	1.Off：Fail to communicate with inverter; 2.On：Connect to inverter.
SER	Communication status with server	1.On 6s/Off 6s：Fail to connect to server; 2.On 1s/Off 1s：Connect to server.

Packing

Label Information
Package Size: 190*110*55mm

No.	Label Type	Label Content
1	Product Label-EN	Product：Stick Logger（Ethernet） Model：LSE-3 Input：DC 5V-15V 1W (Certification and other icon)
2	SN Label-EN	SN QR Code, Number Sequence

Firmware Configuration

Direct Data Transmission	
Domain Name	data1.solarmanpv.com (solarman 3.0)
IP	47.88.8.200 (solarman 3.0)
Port No.	10000 (solarman 3.0)
APN：	None
Data Forwarding	
47.102.152.71,access1.solarmanpv.com,10000 (solarman 3.0)	

Contact

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Product List

No.	Name	Quantity	Note
1	Stick Logger (Ethernet)	1	--
2	Warranty Card	1	--
3	LSE-3 User Guide-EN	1	--
4	Screw	4	--
5	Crowbar	1	