



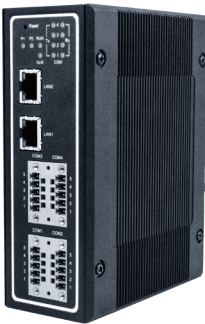
LES920A-SFP-DB - 4-port Industrial RS232/422/485 Device Server SFP/DB

LES920A-SFP-TB - 4-port Industrial RS232/422/485 Device Server SFP/TB

LES920A-RJ45-DB - 4-port Industrial RS232/422/485 Device Server RJ-45/DB

LES920A-RJ45-TB - 4-port Industrial RS232/422/485 Device Server RJ-45/TB

Quick Start Guide



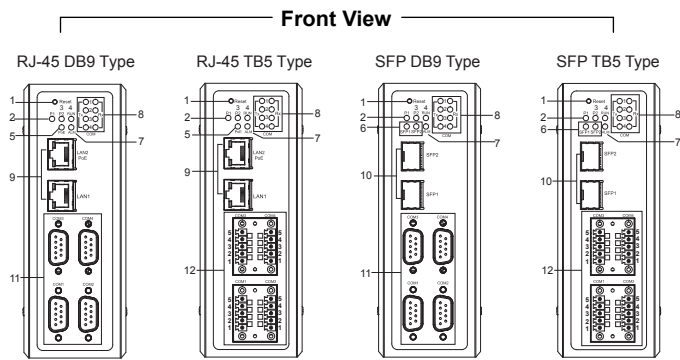
Package Check List

Inside the package you will find the following items:

- (1) 4-port Industrial RS232/422/485 Serial Device Server SFP/DB or
- (1) 4-port Industrial RS232/422/485 Device Server SFP/TB or
- (1) 4-port Industrial RS232/422/485 Device Server RJ-45/DB or
- (1) 4-port Industrial RS232/422/485 Device Server RJ-45/TB
- (1) 7-Pin 5.08mm Lockable Terminal Block (Already mounted to the device)
- (4) 5-Pin 3.81mm Lockable Terminal Block (For TB Models)
- (1) DIN-Rail Kit (Already mounted to the device)
- Protective caps for all SFP and PoE ports (# depends on purchased model)
- (1) Warranty Card

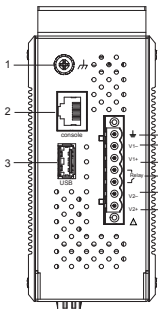
- ⚠ Never install or work on electrical or cabling during periods of lighting activity. Never connect or disconnect power when hazardous gases are present.
- ⚠ Warning: Hot Surface Do Not Touch.
- ⚠ Caution: CLASS 1 LASER PRODUCT. Do not stare into the laser!
- 🏠 This equipment should be installed indoor and not connect directly with equipment installed outdoor and use in ordinary industrial location.

Product Layout



- 1. Reset Button
- 2. PWR1 LED
- 3. PWR2 LED
- 4. RUN LED
- 5. PoE LED
- 6. SFP Ports LED
- 7. Alarm LED
- 8.COM Ports LED
- 9. 10/100 BASE-T(X) Ports or 10/100/1000 BASE-T(X) Ports and/or 10/100/1000 BASE-T(X) PoE Port
- 10. 100/1000 BASE-X SFP Slots
- 11. 9-Pin Male D-Sub Connector for RS-232/422/485
- 12. 5-Pin 3.81mm Terminal Block for RS-232/422/485

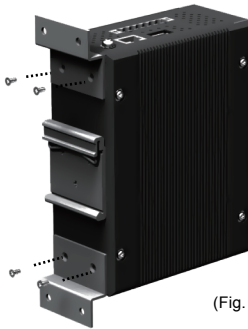
Top View



- 1. Grounding Screw
- 2. Console
- 3. Type A USB for storage or Wifi
- 4. Frame Ground
- 5. Terminal for Power1
- 6. Relay Output with current carrying capacity of 1A@30 VDC (Normal Open)
- 7. Terminal for Power2

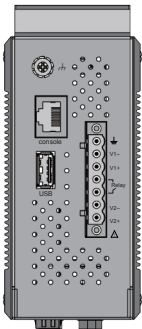
Installation Overview

1. If you have purchased the wall mount kit, place the screws on the back of the device as shown in Figure 1.



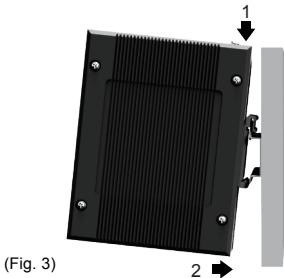
(Fig. 1)

2. Although the unit is internally grounded, in order to ensure overall maximum performance and protect your device, we still advise you to ground the device properly; hazardous ESD can come into contact with it and damage your equipment. On the power terminal block, there is a terminal for Frame Ground; you can choose whether to connect it to the grounding, or you may opt to connect to the grounding screw next to the terminal block (the one chosen should be connected at all times). Refer to Figure 2.



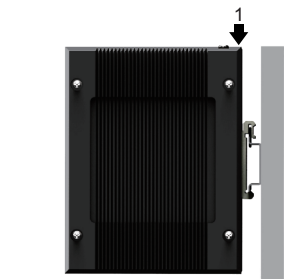
(Fig. 2)

3. You can then choose whether to plug in the I/O ports at this point or do it later depending on the actual location of the device or your level of comfort for performing this task. Remember to plug in the protective caps for the unused SFP and PoE ports.



(Fig. 3)

4. Once the plate has been firmly put in place, proceed to mount the whole device as shown in Figure 3. Proceed to Figure 4 if you want to remove the device from the DIN-Rail.

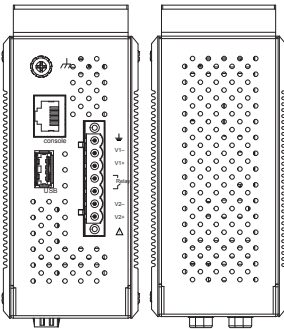


(Fig. 4)

5. Connect the device to the LAN (switch or PC, depending on the case), take care on using the RJ-45 connector

6. Proceed to the device's settings.

- The openings on the sides are for the device's heat dissipation. Never obstruct or cover them with any objects or try to insert objects through the openings.
- This factory IP by default is 10.0.50.100. You can access the device by its WebUI once it is connected to a physical network (or using the Management Utility). For more information on Management Utility, refer to its manual). NOTE: The PC needed for this procedure needs to be in the same subnet. Refer to the device's User's Manual, as needed.

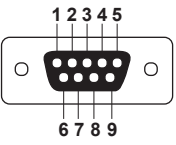


LED Indicators

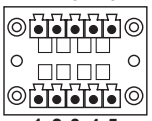
Name	Color	Status	Message
P1	Green	On	Power is being supplied through this power input
P2		Off	Power is not supplied through this power input
RUN	Green	Blinking	AP firmware is running normally
		On/Off	System is not ready or halt
ALM	Red	On	Alarm is triggered by user defined events
		Off	Alarm is not triggered by user defined events
PoE	Green	On	Power is being supplied to a Powered Device(PD)
		Off	Power is not supplied to a PD
SFP	Green	On	SFP port is connected
		Blinking	Data is transmitting on this port
		Off	SFP port is disconnected
LAN (10/100 Mbps models)	Amber	Blinking	Data is transmitting at 10Mbps
	Green	Blinking	Data is transmitting at 100Mbps
LAN (10/100/1000Mbps models)	Amber	Off	Ethernet is disconnected
		On	Ethernet is connected at 10/100Mbps
		Blinking	Data is transmitting at 10/100Mbps
	Green	Off	Ethernet is disconnected
		On	Ethernet is connected at 1000Mbps
		Blinking	Data is transmitting at 1000Mbps
COM	Green	Blinking	COM port is transmitting data
		Off	COM port is not transmitting data

Pin Assignments and Connections


9-Pin Male D-sub Connector for RS-232/422/485

	Pin	RS-232	RS-422	RS-485
	1	DCD	-	-
	2	RxD	TxD+	Data+
	3	TxD	RxD+	-
	4	DTR	-	-
	5	SG	SG	SG
	6	DSR	-	-
	7	RTS	RxD-	-
	8	CTS	TxD-	Data-
	9	RI	-	-

5-Pin Terminal Block for RS-232/422/485

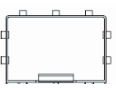
	Pin	RS-232	RS-422 / 4-W RS-485	2-W RS-485
	1	RxD	TxD+	Data+
	2	CTS	TxD-	Data-
	3	TxD	RxD+	-
	4	RTS	RxD-	-
	5	SG	SG	SG

10/100/1000 BASE-T(X) Ethernet, PoE and RS-232



RJ-45								
10/100BASE-T(X)								
Pin	1	2	3	4	5	6	7	8
Signal	Tx+	Tx -	Rx+			Rx -		
1000BASE-T								
Pin	1	2	3	4	5	6	7	8
Signal	BI_DA+	BI_DA-	BI_DB+	BI_DC+	BI_DC-	BI_DB-	BI_DD+	BI_DD-
PoE								
Pin	1	2	3	4	5	6	7	8
DC	V+	V+	V-	V+	V+	V-	V-	V-
RS-232 Console								
Pin	1	2	3	4	5	6	7	8
Signal			Tx	GND	GND	Rx		

100/1000 Base-X Fiber Optics SFP Slot

SFP Slot



SFP LC Connector Port Connection for Single-mode & Multi-mode modules



Cable Wiring

Tx

Rx

Caution
The SFP slot should be used in conjunction with a MSA compliant optical transceiver.

Power Requirements

- Power input: 12-48VDC, 0.65A max. (No PoE)
- Relay output: Relay Output with current carrying capacity of 1A@30 VDC, (Normal Open)
- PoE PD: 48VDC, 8W max.
All circuit shall be connected to SELV circuit.

Field Maintenance and Service

If the device requires servicing of any kind, you may need to disconnect and remove it from its mounting. The initial installation should be done in a way that makes this as convenient as possible.

- Voltage/Power lines should be properly insulated as well as other cables. Be careful when handling so it does not trip over.
- Do not insert foreign objects of any kind into the heat dissipation holes located in the different faces of the device. This may not only harm the internal layout but might cause harm to you as well.
- Do not open the device for any reason. Please contact your dealer for any repair needed or follow the instructions on section of your User’s Manual.

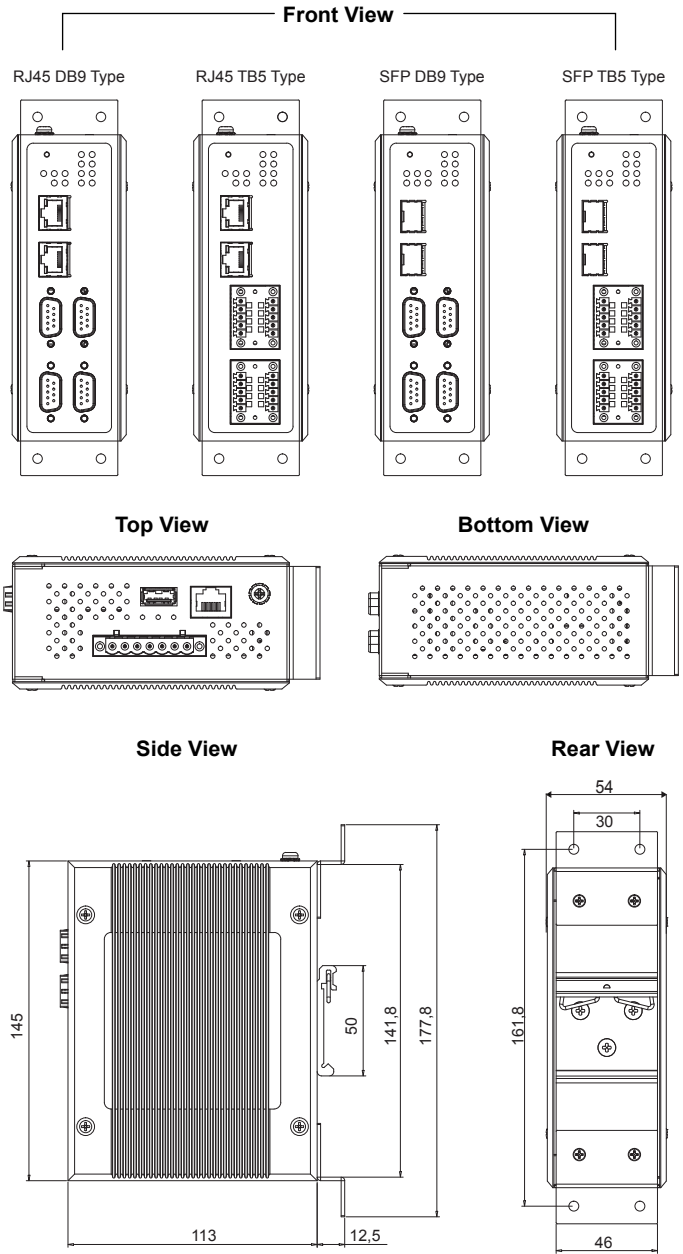
Attention

1. It is recommend to use at least 20 AWG cable and the cable needs to be resistant to at least 105°C on the power connector.
2. Torque applied to the terminal block’s screw should be 4.5 in. lb (0.51 Nm)
3. The device needs to be installed inside a Type 1 housing.
4. The device needs to be installed in an area with 2 degree or less pollution.
5. Clean the device with a soft cloth.
6. If the equipment is used in a manner not specified by the manufacturer, the protection provided by the equipment may not be impaired.

Environmental Limits

- Operating Temperature: -40 to +185°F (-40 to +85°C)
- Storage Temperature: -40 to +185°F (-40 to +85°C)
- Ambient Relative Humidity: 5 to 95%, 55°C (non-condensing)
- Altitude: up to 2,000 m

Mechanical Dimensions (Unit=mm)



Contact and Technical Support

Visit blackbox.com/discover-bb/global-presence for regional technical support and contact information.

