



MSTronic Co., Ltd.

2F, 12, Gongshang Rd., Wugu District, New Taipei City, 248 Taiwan

TEL:886-2-2293-0159 FAX:886-2-2292-8851

E.MAIL: mse@mse.com.tw

WEB: <http://www.mse.com.tw>

SOL40P24-56B1N

Solar/PoE Charge Controller + Gigabit PoE Injector

SPECIFICATION

1. INPUT :

- 1.1 Input Voltage: POE : 36Vdc ~ 57Vdc
Solar : 30V ~ 55V
Battery : 24V



2. OUTPUT :

2.1 Output Voltage & Current:

Model	POE (front)	LOAD (rear)
OUTPUT	56V	24V
Max. Current	0.63A	10A

3. CHARGER :

- 3.1 POE Charge Current : 0.85A (max)
*** for load first, only the balance used to charging.
***only work with battery connected.
- 3.2 POE Input Watts : 30W(min)
- 3.3 POE Input compliant to 802.3at, all 4 pairs available, GIGA.
- 3.4 SOLAR Charge Current : 40A(max) @ $28.8 \pm 0.2V$ Vin



MSTronic Co., Ltd.

2F, 12, Gongshang Rd., Wugu District, New Taipei City, 248 Taiwan

TEL:886-2-2293-0159 FAX:886-2-2292-8851

E.MAIL: mse@mse.com.tw

WEB: <http://www.mse.com.tw>

4. PROTECTION

4.1 Load Short Circuit Protection

DC (P3) or POE output short circuit will not damage the fuse, will Auto-Recover when Load back to normal.

4.2 Battery Reverse, with LED indicates, will not damage the load device.

4.3 Battery low voltage protection : $20V \pm 0.3V$

4.4 Battery voltage back to $24.3V \pm 0.3V$ will auto recover offer power to load.

4.5 LED indicates Load be powered.

4.6 Solar Reverse will no charge current.

4.7 Solar voltage lower than 20V stop charge.

4.8 Only solar input, no battery connected, no charge current.

5 POE to Battery Charger Voltage :

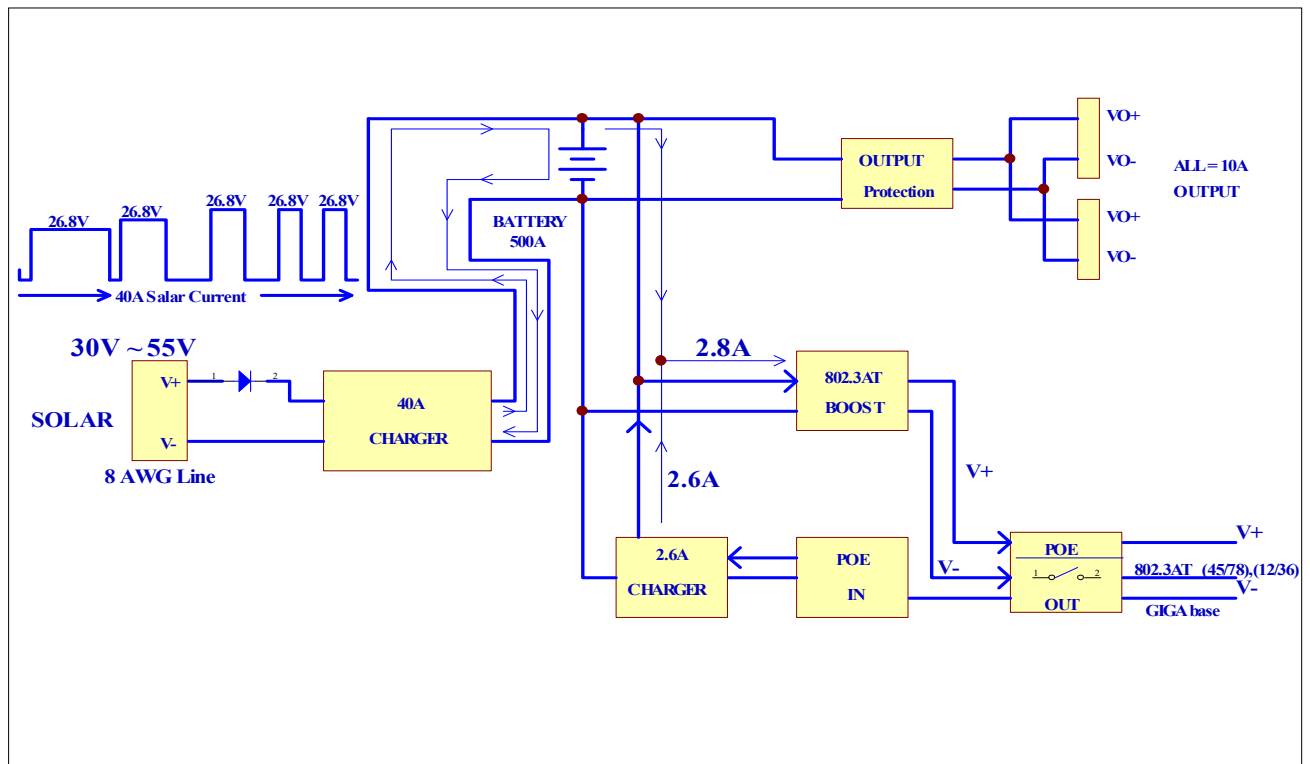
Float = $26.8V \pm 0.3V$

Equalize = $28.4V \pm 0.3V$

6 SOLAR to Battery Charger Voltage :

= $28.8V \pm 0.2V$

Charger Mode :





MSTronic Co., Ltd.

2F, 12, Gongshang Rd., Wugu District, New Taipei City, 248 Taiwan

TEL:886-2-2293-0159 FAX:886-2-2292-8851

E.MAIL: mse@mse.com.tw

WEB: <http://www.mse.com.tw>

7 802.3at POE OUTPUT Pin: (45 = + , 78 = -)

OUTPUT	56V
Max. Current	0.63A
Max. Watts	35W

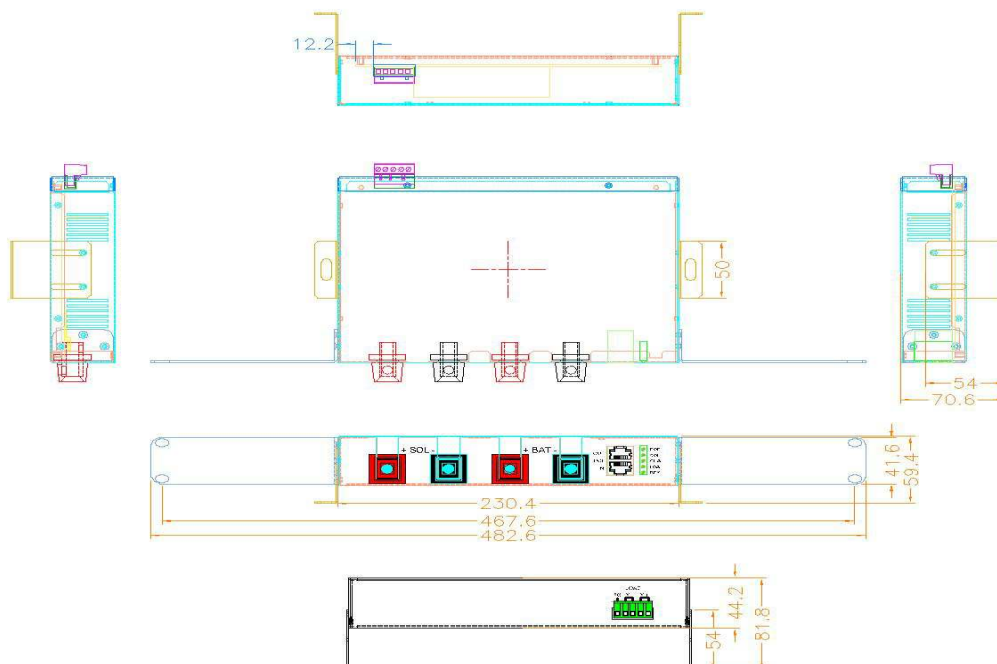
8 P3 = 10A Output.

9. INDICATORS:

- 9.1 POE indicator: POE input
- 9.2 SOL indicator: Solar input
- 9.3 CHA indicator: charging
- 9.4 LOA indicator: load device drawing
- 9.5 REV indicator: battery reversed

10. GENERAL DESCRIPTION

- 10.1 Operation Temperature: -40 - +60 Degree
- 10.2 Storage Temperature: -40 - +85 Degree
- 10.3 Operation Humidity: 5% - 90%
- 10.4 Cooling: Free air cooling
- 10.5 SIZE 230*160*42(D*W*H)
- 10.6 Mounting: 19" 1U rack mount or desktop with L brackets





MSTronic Co., Ltd.

2F, 12, Gongshang Rd., Wugu District, New Taipei City, 248 Taiwan

TEL:886-2-2293-0159 FAX:886-2-2292-8851

E.MAIL: mse@mse.com.tw

WEB: <http://www.mse.com.tw>

11. PIN ASSIGNMENT:

RJ-45 Input (Data & Power) lower socket		
Pin	Symbol	Description
1	BI_DA+, Vin +/-	Data Pair A+ & power Vin +/-
2	BI_DA-, Vin +/-	Data Pair A- & power Vin +/-
3	BI_DB+, Vin +/-	Data Pair B+ & power Vin +/-
4	BI_DC+, Vin +/-	Data Pair C+ & power Vin +/-
5	BI_DC-, Vin +/-	Data Pair C- & power Vin +/-
6	BI_DB-, Vin +/-	Data Pair B- & power Vin +/-
7	BI_DD+, Vin +/-	Data Pair D+ & power Vin +/-
8	BI_DD-, Vin +/-	Data Pair D- & power Vin +/-

RJ-45 Output (Data & Power) upper socket		
Pin	Symbol	Description
1	BI_DA+,	Data Pair A+
2	BI_DA-,	Data Pair A-
3	BI_DB+,	Data Pair B+
4	BI_DC+, Vout +	Data Pair C+ & power Vout (+)
5	BI_DC-, Vout +	Data Pair C- & power Vout (+)
6	BI_DB-,	Data Pair B-
7	BI_DD+, Vout -	Data Pair D+ & power Vout (-)
8	BI_DD-, Vout -	Data Pair D- & power Vout (-)

Note :

1. the model is isolated design.
2. (option model) 12/36 Output.(12= + , 36= -, SOL40P24-56A1R) or (12= - , 36= + , SOL40P24-56A1N)



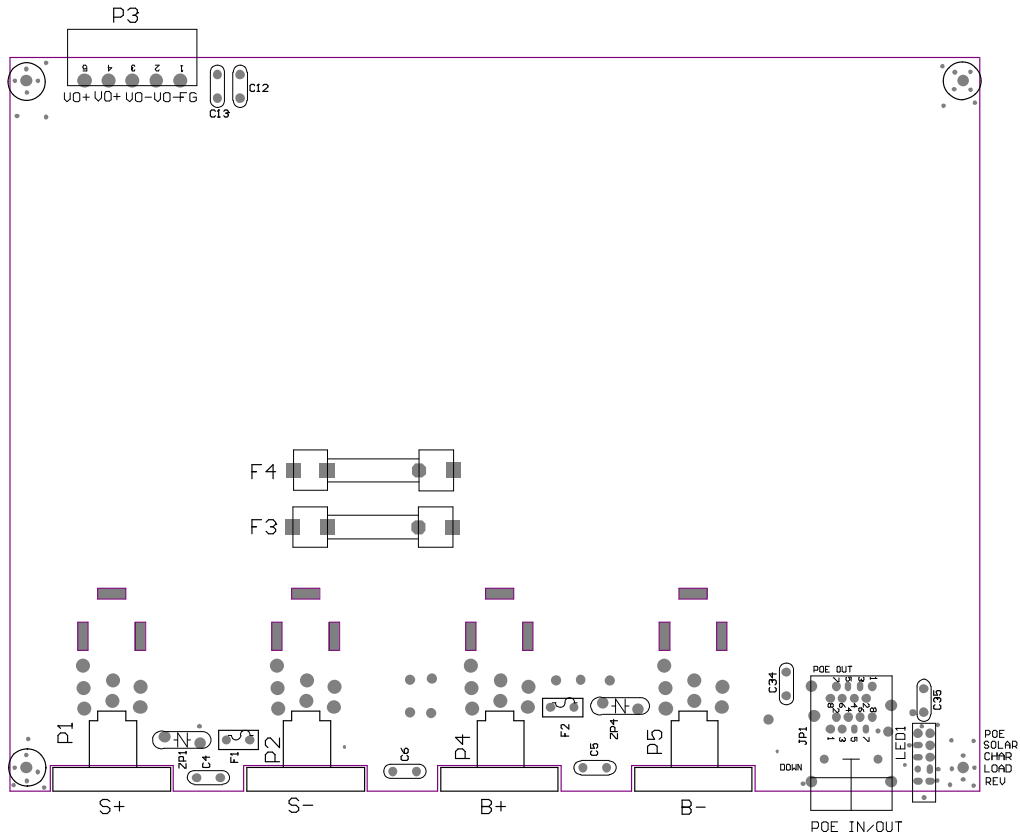
MSTronic Co., Ltd.

2F, 12, Gongshang Rd., Wugu District, New Taipei City, 248 Taiwan

TEL:886-2-2293-0159 FAX:886-2-2292-8851

E.MAIL: mse@mse.com.tw

WEB: <http://www.mse.com.tw>



- S+ = SOLAR INPUT CONNECTER Positive polarity
- S- = SOLAR INPUT CONNECTER Negative polarity.
- B+ = BATTERY CONNECTER Positive polarity
- B- = BATTERY CONNECTER Negative polarity.
- POE IN/OUT = POE IN/OUT 803.3at CONNECTER
- F3,4 = T25A/250V
- P3 = 24V/10A OUTPUT
- IND = LED INDICATORS



MSTronic Co., Ltd.

2F, 12, Gongshang Rd., Wugu District, New Taipei City, 248 Taiwan

TEL:886-2-2293-0159 FAX:886-2-2292-8851

E.MAIL: mse@mse.com.tw

WEB: <http://www.mse.com.tw>

