

Isolated DC-DC Converter

Typical Efficiency 80%

SC Protection (Auto Recover)

Low Ripple($\pm 1\%$), Metal Case Shield

Broadband Noise Filter at Input



Input Characteristic

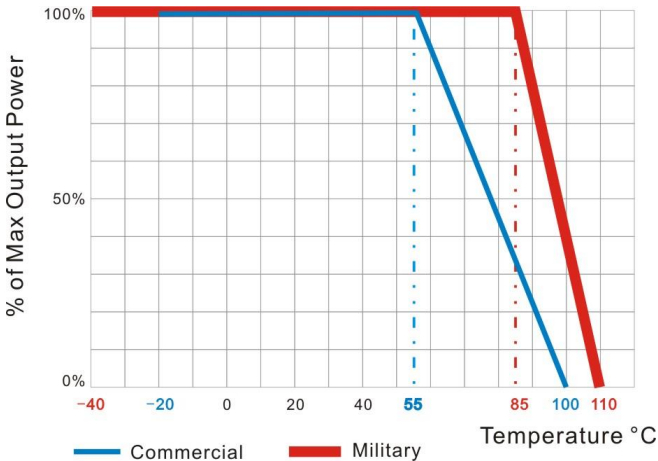
Default Input Voltage Range (2:1)

| | |
|------|-----------|
| 12V | 9~18VDC |
| 24V | 18~36VDC |
| 48V | 36~72VDC |
| 110V | 80~170VDC |

Wide Input range 4:1 (contact sales@current-logic.com For more info)

Input Reverse Protection: No
Input Under Voltage Protection: Yes

Temperature performance:



Output Characteristic

| | |
|---------------------------|----------------------------------|
| Typical Efficiency: | 80% |
| Ripple p-p: | 1% of output voltage (MAX 400mV) |
| Load Regulation: | 0.4% |
| Line Regulation : | 0.2% |
| Temperature Regulation: | $\leq 0.05\%/^{\circ}\text{C}$ |
| Dynamic response: | $\pm 4.0/500\mu\text{s}$ |
| Short-circuit Protection: | yes |
| Start Time Delay: | $\leq 200\text{ms}$ |

Other info

Switching frequency: 180KHz \pm 20 KHz

Operating temperature:
Industrial -25°C ~ +55°C
Military -40°C ~ +85°C

Max Allowed Case Temperature:
Industrial 100°C
Military 110°C

Storage Temperature:
Industrial -40°C ~ +105°C
Military -55°C ~ +120°C

Storage Humidity: 20~90%

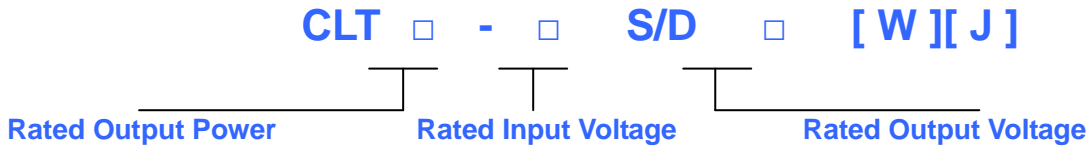
Isolation Voltage:
Input - Output 1500 VDC $\leq 0.5\text{mA}/1\text{min}$ *
Input - Case 500Vdc $\leq 0.5\text{mA}/1\text{min}$

MTBF: 200000Hrs

Case Material: Metal

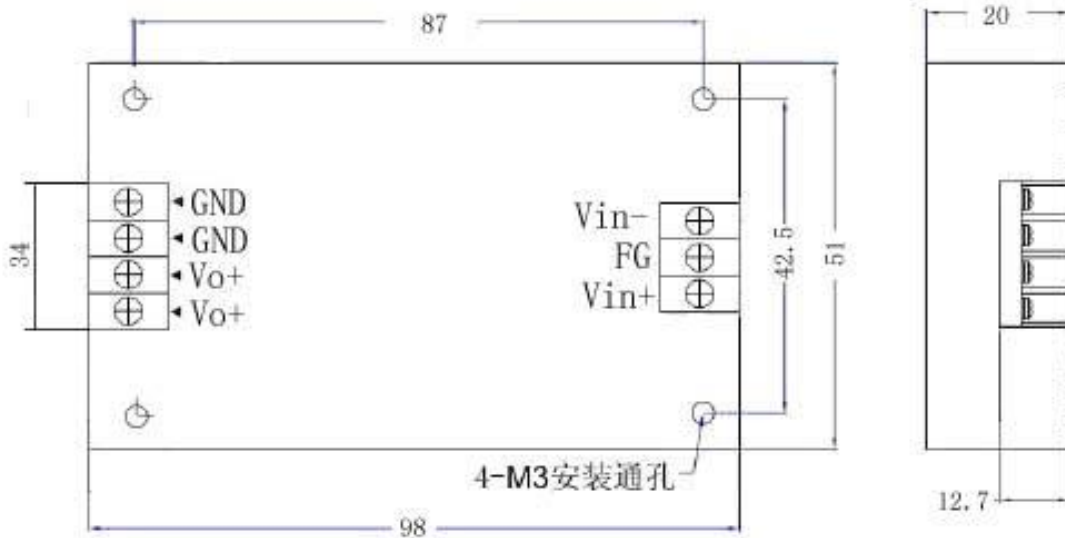
Remote ON/OFF: Implement if needed

Ordering Information:



Note: S – Single Output D – Dual Outputs
 Optional: J – Military W - 4:1 input (Leave it empty for Industrial normal input range)

Dimensions:



Unit: mm

Part number list (50W):

| Input voltage (V) | Input voltage<Range V> | Output voltage(V) | Output current(A) | Efficiency | Part Number |
|----------------------|---------------------------|----------------------|----------------------|------------|--------------------|
| 12 | 9~18 | 5 | 10 | 81% | CLT50-12S05 |
| 12 | 9~18 | 12 | 4.2 | 83% | CLT50-12S12 |
| 12 | 9~18 | 24 | 2.1 | 85% | CLT50-12S24 |

| | | | | | |
|------------|--------|-----|-------|-----|---------------------|
| 24 | 18~36 | 5 | 10 | 81% | CLT50-24S05 |
| 24 | 18~36 | 12 | 4.2 | 83% | CLT50-24S12 |
| 24 | 18~36 | 24 | 2.1 | 85% | CLT50-24S24 |
| 48 | 36~72 | 5 | 10 | 81% | CLT50-48S05 |
| 48 | 36~72 | 12 | 4.2 | 83% | CLT50-48S12 |
| 48 | 36~72 | 24 | 2.1 | 85% | CLT50-48S24 |
| 110 | 72~144 | 5 | 10 | 81% | CLT50-110S05 |
| 110 | 72~144 | 12 | 4.2 | 83% | CLT50-110S12 |
| 110 | 72~144 | 24 | 2.1 | 85% | CLT50-110S24 |
| 12 | 9~18 | ±5 | ±5 | 81% | CLT50-12D05 |
| 12 | 9~18 | ±12 | ±2.1 | 83% | CLT50-12D12 |
| 12 | 9~18 | ±24 | ±1.05 | 85% | CLT50-12D24 |
| 24 | 18~36 | ±5 | ±5 | 81% | CLT50-24D05 |
| 24 | 18~36 | ±12 | ±2.1 | 83% | CLT50-24D12 |
| 24 | 18~36 | ±24 | ±1.05 | 85% | CLT50-24D24 |
| 48 | 36~72 | ±5 | ±5 | 81% | CLT50-48D05 |
| 48 | 36~72 | ±12 | ±2.1 | 83% | CLT50-48D12 |
| 48 | 36~72 | ±24 | ±1.05 | 85% | CLT50-48D24 |
| 110 | 72~144 | ±5 | ±5 | 81% | CLT50-110S05 |
| 110 | 72~144 | ±12 | ±2.1 | 83% | CLT50-110S12 |
| 110 | 72~144 | ±24 | ±1.05 | 85% | CLT50-110S24 |

Only frequently used types are listed, for special input/output, please contact sales@current-logic