

# Datasheet



## DCU 210E Engine Controller Marine Watch LT-ONE Alarm Panel

**Part#: 1006475 (DCU 210E Engine Controller)**  
**1500074 (Marine Watch LT-ONE Alarm Panel)**

Rev. August 22, 2024

### Interfaces

| Section                  | Qty. | Min      | Typ.         | Max          | Unit                           | Comment                                                                   |
|--------------------------|------|----------|--------------|--------------|--------------------------------|---------------------------------------------------------------------------|
| Power Supply, Vcc        | 1    | 8<br>-   | 12/24<br>0.5 | 32<br>2      | VDC<br>A                       | Current consumption @ 24 VDC.                                             |
| Flexible I/O             | 19   |          |              |              |                                | Can be configured as described in the Flexible I/O section below.         |
| Relay                    | 2    | -<br>0   | -<br>-       | 48<br>1      | VDC<br>A                       | Potential free form C contacts. Internally fused.                         |
| Tacho                    | 1    | 0.1<br>4 | 5<br>-       | 10<br>32     | kHz<br>Vpp                     | Magnetic pickup                                                           |
| Thermistor / PT100 Input | 2    | 50<br>0  | -<br>-       | 60000<br>800 | $\Omega$<br>$^{\circ}\text{C}$ | Accuracy: $\pm 2.0\%$ .<br>With optional wire resistance comp.            |
| CAN bus #1               | 1    | -        | 250          | -            | kbps                           | SAE J1939                                                                 |
| CAN bus #2               | 1    | -        | 250          | -            | kbps                           | SAE J1939                                                                 |
| Ethernet                 | 1    | -        | 10 / 100     | -            | Mbps                           | Auto Crossover                                                            |
| Modbus TCP               | 1    | -        | 10 / 100     | -            | Mbps                           |                                                                           |
| Modbus RTU               | 1    | 9600     | 19200        | 115200       | baud                           | 8 bit, even parity, 1 stop bit.<br>Failsafe biasing, internal termination |
| RIO Link Connection      | 1    | -        | 19200        | -            | baud                           | 8 bit, even parity, 1 stop bit                                            |
| USB Port                 | 1    | -        | -            | 480          | Mbps                           | USB 2.0 Hi-speed Memory Interface                                         |

### Flexible I/O

| Section            | Qty. | Min      | Typ.         | Max        | Unit   | Comment                                           |
|--------------------|------|----------|--------------|------------|--------|---------------------------------------------------|
| Digital Input      | 19   | 8<br>0   | -<br>-       | Vcc<br>2   | V      | High level<br>Low level                           |
| Digital Output     | 19   | -<br>0   | Vcc-0.5<br>- | -<br>0.2   | V<br>A | Power supply - 0.5 V<br>Current limited           |
| 4 – 20 mA Input    | 19   | 0        | 4-20         | 22         | mA     | Accuracy: $\pm 0.5\%$ of typical range            |
| Analogue Input     | 19   | 0        | -            | Vcc        | V      | Accuracy: $\pm 0.05\text{ V}$                     |
| 24 V Supply Output | 19   | -<br>0   | Vcc-0.5<br>- | -<br>0.2   | V<br>A | Current limited                                   |
| 0 V Supply Output  | 4    | 0<br>0   | 0.1<br>-     | -<br>0.5   | V<br>A |                                                   |
| 5 V Supply Output  | 1    | 4.8<br>0 | 5.0<br>-     | 5.2<br>0.1 | V<br>A | For supply of 0-5 V sensors etc. Current limited. |

# Datasheet



## DCU 210E Engine Controller Marine Watch LT-ONE Alarm Panel

**Part#: 1006475 (DCU 210E Engine Controller)**  
**1500074 (Marine Watch LT-ONE Alarm Panel)**

Rev. August 22, 2024

### Screen

| Section       | Width | Typ.  | Height | Unit   | Comment |  |
|---------------|-------|-------|--------|--------|---------|--|
| Size          | -     | 5.7   | -      | inch   |         |  |
| Resolution    | 640   | -     | 480    | pixels |         |  |
| Pixel Density |       | 140   |        | PPI    |         |  |
| Colors        | -     | 16.7M | -      | colors |         |  |

|               | Condition       | Min | Typ. | Max | Unit              | Comment              |
|---------------|-----------------|-----|------|-----|-------------------|----------------------|
| Viewing angle | horizontal      | ±60 | ±65  | -   | Deg.              | Contrast ratio >10:1 |
|               | vertical        | ±47 | ±52  | -   |                   |                      |
| Brightness    | Backlight 100 % | 400 | 450  | -   | cd/m <sup>2</sup> |                      |

### Operator Interface

- Capacitive touch interface
- Touch buttons
  - Part# 1006475: 4 buttons
  - Part# 1500074: 2 buttons

### Connectors

- 4 x 12 pin Deutsch DT06-12SA (Mating connector)
- USB 2.0 Type A Host Port (Service only)
- Ethernet RJ45 IP67 Bajonett Black (Use included RJ45 Plug Kit)

### Measurements and Weight

| Section | Condition | Weight | Width | Height | Depth | Unit | Comment                  |
|---------|-----------|--------|-------|--------|-------|------|--------------------------|
| Size    | Bezel     | -      | 167   | 135    | 68    | mm   | Depth without connectors |
|         | All-glass |        | 162   | 130    | 67    |      |                          |
| Cut out |           | -      | 155   | 123    | -     | mm   | Access depth: 90 mm      |
| Weight  |           | 0.8    | -     | -      | -     | kg   |                          |

### Environmental

| Section                             | Condition   | Min. | Typ. | Max. | Unit | Comment                                 |
|-------------------------------------|-------------|------|------|------|------|-----------------------------------------|
| Operating Temperature               | Operational | -25  | -    | +70  | °C   | DNV No. 2.4 Location Class D, Open deck |
| Storage Temperature                 | Not powered | -30  | -    | +85  | °C   |                                         |
| Enclosure Ingress Protection Rating | Operational | IP56 | -    | -    | -    | Complete enclosure.                     |
| Front Ingress Protection Rating     | Operational | IP66 | -    | -    | -    | From the front when mounted.            |
| Vibration                           | Operational | -    | 4    | -    | g    | IEC 60068-2-6 Fc                        |

# Datasheet



## DCU 210E Engine Controller Marine Watch LT-ONE Alarm Panel

**Part#:** 1006475 (DCU 210E Engine Controller)  
1500074 (Marine Watch LT-ONE Alarm Panel)

Rev. August 22, 2024

### Testing & Approvals

Tested according to DNV Standard for Certification DNV No. 2.4, harmonized with IACS UR E10 and IEC 60092-504.

#### Validity of Information

Data valid at revision date. Auto-Maskin reserves the right to make improvements and changes of specification at any time.