# Intelligent Lubrication Control Station UC-3N

# (tall type)

Introduction

Intelligent lubrication control station UC-3N is the latest control device specially designed for centralized lubrication control application. Its design utilized intelligent control technique and Computer Network and Communication Technology. UC-3N is a powerful control station; its intelligent control ability owns multiple control modes and monitoring modes, supports network, can form a large distributed control satisfy the control system to requirements of most lubrication control fields.



#### Complete and powerful control function

- 4 completely independent control channels, which can monitor and control 4 independent lubrication systems. Each channel owns independent monitoring signal input with no interference to each other.
- UC-3N owns multiple lubrication control modes: Timer lube, Counter lube, Pulse burst lube, Signal trigger mode lube, which can satisfy all kinds of complicated control requirements.
- PAUSE can freely select TIMER and COUNTER mode, set PAUSE as 0(zero, to lubricate the system all the time), or set PAUSE as OFF (PAUSE function deactivated. Controller will NOT go to LUBE state automatically, it only receives orders to perform lubrication from network).
- Multiple monitoring modes available. There are regular monitoring modes like Pressure Switch monitoring mode and Cycle Switch monitoring mode, can setup monitoring time to ensure the reliable performance of the lubrication system. UC-3N also can perform signal tracking monitor, output following control, to meet intelligent lubrication's requirements.

- Supports Insert lubrication function via panel operations. Can start and abort at any time, easy for system's installation, test and debug.
- 4-digit password protection, prevent programmed parameters being changed accidentally.
- **u** Power down protection function enables UC-3N auto stores lubrication parameters when power-off happens to the system, and continues carry out operation from the point of power-off. This function ensures the lubrication continuous and reliable
- Interlock control and level monitoring function, can realize interlock control with external control system.
- Supports industrial standard MODBUS protocol, can realize network with most industrial control systems, can realize remote monitoring and control through read, setup states and parameters, change control modes and states via network.
- 4 channels analog signal inputs, can monitor analog quantity like temperature or (lubricating grease) pressure. There is an independent temperature sensor inside the control station. It is used to activity monitor the temperature of the control station location.
- Can monitor system voltage, to ensure the lubrication system can work safe and reliability.

## Convenient and easy operation interface

- **u** Displays information with 4 digits LED digital monitor, it is easy to use.
- u LED signal lights indicate system-working status clearly.
- **u** Film keypad operation with 3 keys. Easy and quick parameter setup improves operational efficiency.
- Tree structure operation menu, easy to check and set system parameters.

#### **Designed for industry environment**

- Can work steady under a complicated power supply condition. The surge, sink, brief interruption and superposed strong interference of the industrial power supply will not negative influence the control station.
- Aborative electromagnetic compatibility (EMC) design enables UC-3N can work reliable in complicated electromagnetic environment and does not bring out harmful electromagnetic noises.
- Excellent acclimatization. Can work in a wide temperature range from  $-30^{\circ}$  to  $70^{\circ}$ .
- Standard DIN industry rail mounting (also can use screw to mount directly). According to different requirements, there are tall and short two dimensions for user to choose from.

### High reliability on design and manufacture

- Design complies with industrial application standard makes controller can work 24 hours continuously at high workload.
- Control modes and parameters are stored in EEPROM for a long time without backup power support. UC-3N was especially improved EEPROM parameter correction function, which improves the high reliability of lubrication control.
- Main electronic components are all Industrial level and high-temperature ageing and stability treated; ensure the reliability of the whole control unit.
- SMT manufacturing technique with reinforcement treatment enables the controller can work stable even under severe vibration condition.

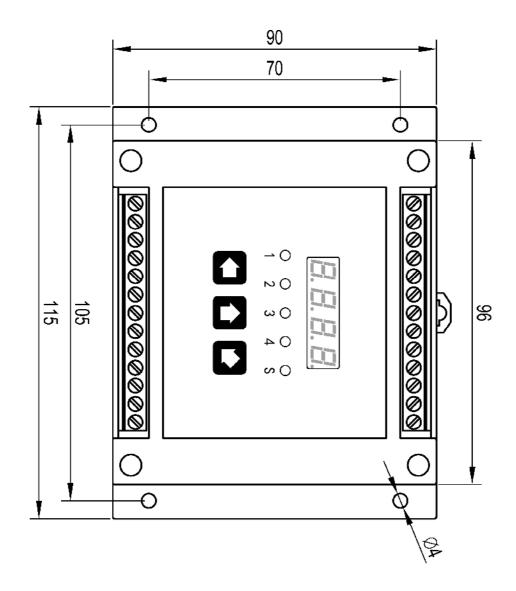
### Applicable lubrication systems:

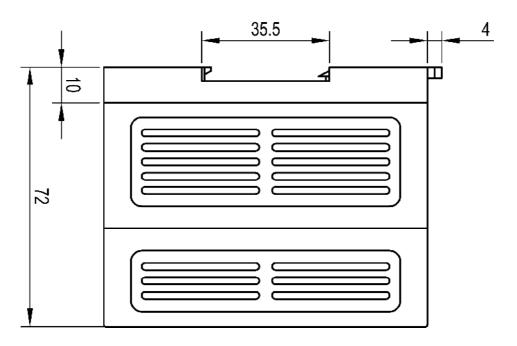
- 1. Intelligent lubrication system
- 2、Single-line lubrication system
- 3、Dual line lubrication system
- 4、 Minimal Quantity air/oil mist lubrication system
- 5、China oil lubrication system
- 6. Injection lubrication system

# **Technical Specification**

Rated working voltage	12V~42V DC
Rated dissipation	<4W
· · · ·	
Drive Max. output	5A, 250V AC, or 5A, 28VDC
LUBE control modes	Timer <b>T</b> , Counter <b>C</b> , Pulse burst <b>P</b>
LUBE time range	1~65535 s
LUBE counting range	1~65535
LUBE pulse burst range	1~65535
Pulse current on time range	0.01~655.35 s
Pulse current on interval range	0~655.35 s
PAUSE time range	0~4 294 967 295 s
PAUSE counting range	1~4 294 967 295
External input signal	10V ~ 42V DC, input equivalent resistance 10k
Fault relay output	50V AC,5A Max,N. C.
Analog input	0 ~ 20mA , industrial current signals × 4 channels
Communication interface	RS-485,asynchronous half-duplex
Communications protocol	Modbus
Communications baud rate	300 ~ 38400
Parity	No parity、Odd parity、Even parity
Protection level	IP40
Working temperature	-30°C ~70°C
Working humidity	20% ~ 90% no condensation water
Dimension	90×115×72 mm(tall type)
Weight	218 g(tall type)

\* For technical improvement reason, we may change our product's Technical Specification at any time without prior notice.





Suzhou Leetern Industry Control Tel: +86-15250446590 Fax: +86-512-68661838 www.Leetern.com

jane@Leetern.com