

# NOSHOK 1900 SERIES

# TECHNICAL MANUAL

## MICRO-LINE POWER SUPPLY

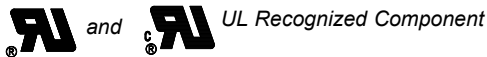
1010 WEST BAGLEY ROAD  
BEREA, OHIO 44017

PHONE 440/243-0888  
FAX 440/243-3472

E-MAIL: noshok@noshok.com  
WEBSITE: www.noshok.com

## MICRO-LINE POWER SUPPLY FOR 1900C-3/1900C-4 CURRENT LOOP PROCESS INDICATORS

- PROVIDES POWER FOR THE MICRO-LINE SERIES
- 12 VDC OUTPUT @ 400 mA
- EASILY ATTACHED TO BACK OF 1900 & 1950 INDICATORS



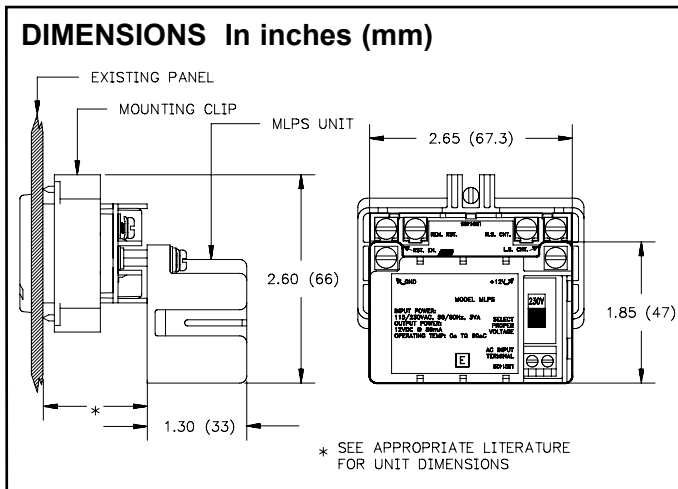
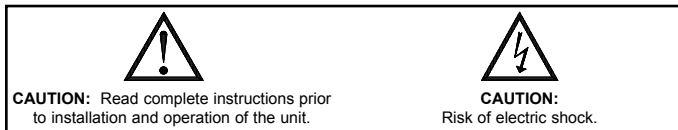
### DESCRIPTION

This power supply is designed to attach to the rear of the 1900 & 1950 Series indicators. It provides a 12 VDC output and can be powered from an 85 Vac to 250 Vac source.

*Caution: The maximum output current is 80 mA. Check the specifications of the specific counter(s)/indicator(s) and sensor(s) being used to ensure that total current requirements do not exceed 80 mA.*

### SAFETY SUMMARY

All safety related regulations, local codes and instructions that appear in the manual or on equipment must be observed to ensure personal safety and to prevent damage to either the instrument or equipment connected to it. If equipment is used in a manner not specified by the manufacturer, the protection provided by the equipment may be impaired.



### SPECIFICATIONS

- POWER REQUIREMENTS:** 85 Vac to 250 Vac, 50/60 Hz, 14 VA.
- POWER OUTPUT:**  
+16 VDC max @ 4 mA; 11.5 VDC min @ 400 mA
- ENVIRONMENTAL CONDITIONS:**  
**Operating Temperature:**  
**Storage Temperature:** -30° C to 75° C  
**Operating and Storage Humidity:** 85% max. (non-condensing) from 0° C to 50° C  
**Altitude:** Up to 2000 meters
- CERTIFICATIONS AND COMPLIANCES:**

#### SAFETY

UL Recognized Component, File # E179259, UL 61010-1, CSA C22.2 No. 61010-1

Recognized to U.S. and Canadian requirements under the Component Recognition Program of Underwriters Laboratories, Inc.

Output meets Class 2 power requirements per UL 1310.

IECEE CB Scheme Test Certificate # US/8946/UL,

CB Scheme Test Report # E179259-V2-S1

Issued by Underwriters Laboratories, Inc.

IEC 61010-1, EN 61010-1: Safety requirements for electrical equipment for measurement, control, and laboratory use, Part 1.

#### ELECTROMAGNETIC COMPATIBILITY

Emissions and Immunity to EN 61326: Electrical Equipment for Measurement, Control and Laboratory use.

#### Immunity to Industrial Locations:

Electrostatic discharge	EN 61000-4-2	Criterion A 4 kV contact discharge 8 kV air discharge
Electromagnetic RF fields	EN 61000-4-3	Criterion A 10 V/m
Fast transients (burst)	EN 61000-4-4	Criterion A 2 kV power 1 kV signal
Surge	EN 61000-4-5	Criterion B 1 kV L-L, 2 kV L&N-E power 1 kV signal
RF conducted interference	EN 61000-4-6	Criterion A 3 V/rms
Voltage dip/interruptions	EN 61000-4-11	Criterion A 0.5 cycle

#### Emissions:

EN 55011 Class B

#### Notes:

1. Criterion A: Normal operation within specified limits.
2. Criterion B: Temporary loss of performance from which the unit self-recovers.
3. **CONSTRUCTION:** High impact black plastic. Mounting hardware included. Installation Category II, Pollution Degree 2.
4. **CONNECTION:** Two position terminal block which accepts one 14 AWG wire (torque terminal screws to 5 inch-lbs. [0.56 N-m]).
5. **WEIGHT:** 2 oz (47 g)

## INSTALLATION ENVIRONMENT

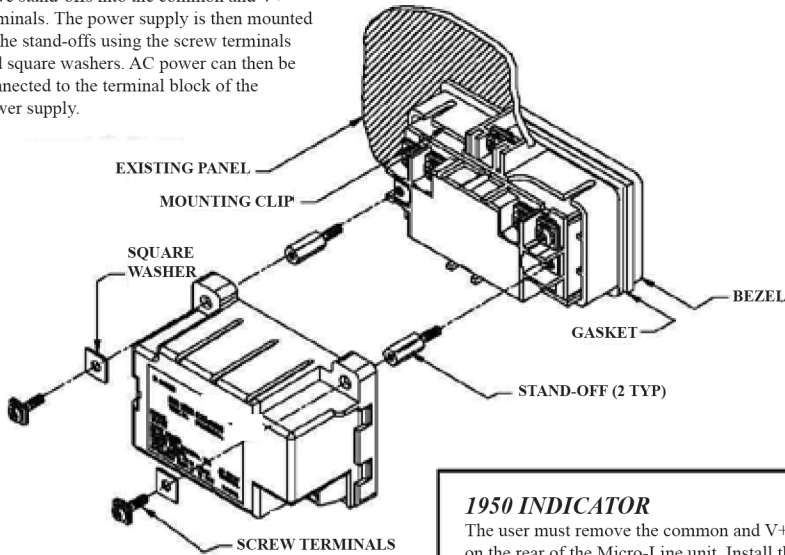
The unit should be installed in a location that does not exceed the maximum operating temperature and provides good air circulation. Placing the unit near devices that generate excessive heat should be avoided.

## INSTALLATION PROCEDURE

These power supplies are shipped with all of the necessary hardware to mount to the rear of an installed Micro-Line unit. Refer to the instructions that correspond to your Micro-Line unit for proper installation.

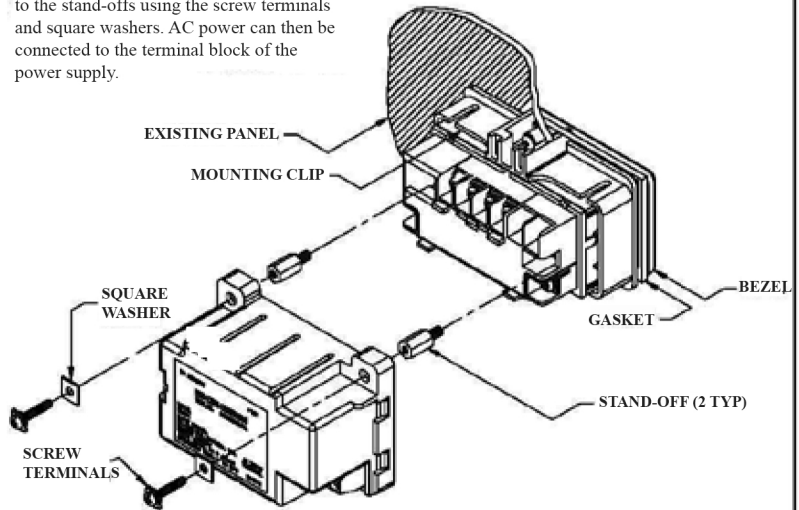
### 1900 INDICATOR

The user must remove the common and V+ screw terminals on the rear of the Micro-Line unit. Install the 1/4" hex drive stand-offs into the common and V+ terminals. The power supply is then mounted to the stand-offs using the screw terminals and square washers. AC power can then be connected to the terminal block of the power supply.



### 1950 INDICATOR

The user must remove the common and V+ screw terminals on the rear of the Micro-Line unit. Install the 3/16" hex drive stand-offs into the common and V+ terminals. The power supply is then mounted to the stand-offs using the screw terminals and square washers. AC power can then be connected to the terminal block of the power supply.



### Corporate Headquarters

1010 West Bagley Road  
Berea, Ohio 44017  
Ph: 440.243.0888  
Fax: 440.243.3472  
E-mail: noshok@noshok.com  
Web: www.noshok.com



## TROUBLESHOOTING

For further technical assistance, please contact us.