

LPS500

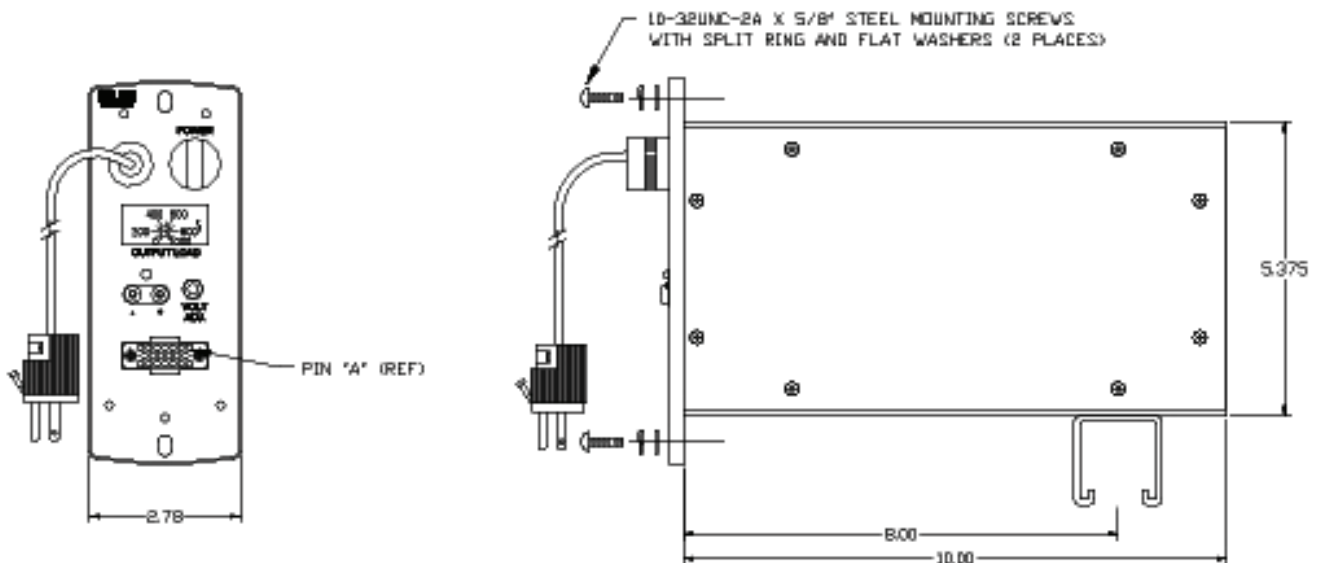
The LPS500 is a Class 1E, form, fit and function replacement for the Foxboro 610A loop power supply, as modified for specific applications. It provides a regulated, current-limited output from 38.6 to 46.0 Vdc to a single loop transmitter.

It uses a single power unit originally designed for the NUSI LPS801, combined with interfaces from the obsolete SPS500 semi-regulated power supply, including the faceplate and M20 pin connections. A front-plate-accessible 1000 Ω potentiometer to adjust total loop resistance is standard on the LPS500.

The LPS500 is similar in function to the SPS500-03, but instead of an output fuse on the faceplate, the LPS500 includes a power available LED, a combination test jack, and a voltage adjustment potentiometer.



LPS500



NUSI 500 Series

Linear Power Supply

SPECIFICATIONS

Power Supply Voltage:	117 Vac ($\pm 10\%$), 60 Hz
Power Consumption:	Less than 10 W at maximum specified voltage and current
Input Fuse:	0.25 A, slow blow, type 3AG fuse for each regulator
Output:	Adjustable from 38.6 to 46.0 Vdc
Line Regulation:	Less than or equal to 0.25% change in output voltage with ac variations from low line to high line
Load Regulation:	Less than or equal to 0.5% change in output voltage with load change from 4 to 70 mA
Ripple:	Less than 20 mVac peak-to-peak @ 70 mA load
Current Limit:	Output short circuit current less than or equal to 130 mA
Dielectric Withstand:	Input to output: 2500 Vdc; 1000 Vac
	Input to chassis: 2500 Vdc; 1000 Vac
	Output to chassis: 700 Vdc; 500 Vac
Surge:	No damage when the waveform of IEEE-472-1974 is applied to output or power ports in transverse or common mode
Qualifications:	Qualified to IEEE 323 1974/1983, "mild" environment
	Qualified to IEEE 344-1975/1987, seismic
Ambient Temperature:	32 °F to 122 °F (0 °C to 50 °C) (continuous operation)
	122 °F to 140 °F (50 °C to 60 °C) (abnormal operation for up to 200 hours)
Ambient Temperature Effects:	Less than or equal to 0.5% change in output voltage per 54 °F (30 °C) change in ambient temperature
Relative Humidity:	0% RH to 95% RH, non-condensing
Pressure:	Atmospheric
Radiation Limits:	104 rad TID gamma over forty years

HOW TO ORDER

Model LPS500 is currently available in the -03 style. The LPS500 and other units in the NUSI 500 Series, including the SPS500, can be furnished upon request in the -01 and -02 styles, which use a terminal block versus an M20 connector on the faceplate.

The -01 style uses a terminal block for both power and signal terminations.

The -02 style uses a cord-set for power and uses the terminal block for signal terminations only.

Model LPS500 is currently available with an output range of 38.6 to 46.0 Vdc. Other output ranges can be furnished upon request.

Order model number LPS500-03 with PN NUS A265PA 1.

CONTACT INFORMATION:

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