

# I/A Series<sup>®</sup> Hardware Field Automation Subsystem Micro-I/A<sup>™</sup> Battery Backup Unit (Type 1)



#### DESCRIPTION

The Micro-I/A Type 1 Station Battery Backup Unit (BBU) provides secondary power to a Micro-I/A Type 1 Station when primary power to the station is not available. Depending on level of charge, the BBU can completely power a fully operating station for up to 180 minutes. Connectors are provided with the Battery Backup Unit for wiring to the Micro-I/A Type 1 Station.

#### PACKAGING

The BBU is packaged in a compact Type 1 physical configuration which permits:

- · Easy installation and removal
- DIN rail mounting in field locations adjacent to the Micro-I/A Type 1 Station

#### CONSTRUCTION

The Micro-I/A Type 1 Battery Backup Unit includes two sections: internal batteries and a charging circuit.

#### BATTERIES

The BBU's two internal batteries have a 3-year lifespan and are user replaceable; replacement can be performed while the Micro-I/A Type 1 Station is receiving normal primary power.

#### **VISUAL INDICATOR**

A green LED indicator located on the front of the BBU is steadily illuminated when the batteries are fully charged and flashes when the batteries are being charged (i.e., charging power is being applied to the Battery Backup Unit). When the LED is off, charging power feed to the BBU has been disconnected or the unit is in use.



#### FUNCTIONAL SPECIFICATIONS

#### **Electromagnetic Compatibility**

EUROPEAN COMPLIANCE Complies with Council Directive 89/336/EEC as amended by 92/31/EEC and 93/68/EEC RADIO FREQUENCY EMISSIONS EN 55011 Class A, CISPR 11 Class A ELECTROSTATIC DISCHARGE EN 61000-4-2, IEC 61000-4-2, 4 kV/8 kV contact/air **RF RADIATED FIELD** EN 61000-4-3, IEC 61000-4-3, 10 V/m ac POWER Burst EN 61000-4-4, IEC 61000-4-4, 2 kV Surge EN 61000-4-5, IEC 61000-4-5, 1 kV/2 kV Conducted RF EN 61000-4-6, IEC 61000-4-6, 3 V I/O SIGNAL/CONTROL Burst EN 61000-4-4, IEC 61000-4-4, 1 kV Surge EN 61000-4-5, IEC 61000-4-5, 1 kV Conducted RF EN 61000-4-6, IEC 61000-4-6, 3 V

#### Power INPUT

Voltage 10 to 28 V dc

Input Power

1 W (typical) 7 W (maximum) at complete discharge

Charge Time

10 hours to fully charge a completely discharged battery

OUTPUT

*Voltage* 8 V dc at 4.6 amp hours

System Operating Time 180 minutes

Battery Life

3 years (minimum)

#### Certification

Listed by Underwriters Laboratories (UL) to UL1950 and CAN/CSA C22.2 No. 950 as Information Technology Equipment (ITE). Output is Safety Extra Low Voltage (SELV) limited power (Class 2). Input power must be from a listed/certified SELV limited power (Class 2) source such as the Micro-I/A 24 V dc Power Supply (Type 1).

#### ENVIRONMENTAL SPECIFICATIONS

#### **Ambient Temperature**

OPERATING 0 to 50°C (32 to 122°F) STORAGE -40 to +70°C (-40 to +158°F)

#### **Relative Humidity**

OPERATING 5 to 95% (Noncondensing) STORAGE 5 to 95% (Noncondensing)

#### Mechanical

VIBRATION (OPERATING) 0.75 g (5 to 200 Hz)

#### Chemical

CORROSION AND CONTAMINATION Per ISA Standard S71.04, Class G1

#### **Flammability Effects**

CIRCUIT BOARD 94V1

# Transportation

ASTM D 999-75

## PHYSICAL SPECIFICATIONS

#### Height

173 cm (6.8 in)

# Mass

1645 g (3.62 lb) (with batteries) 485 g (1.07 lb) (without batteries)

### Width

117 cm (4.6 in)

# Depth

89 cm (3.5 in)

The Foxboro Company 33 Commercial Street Foxboro, Massachusetts 02035-2099 United States of America <u>http://www.foxboro.com</u> Inside U.S.: 1-508-543-8750 or 1-888-FOXBORO (1-888-369-2676) Outside U.S.: Contact your local Foxboro Representative.

Foxboro, I/A Series, and Micro-I/A are registered trademarks of The Foxboro Company.

Copyright 1997-2000 by The Foxboro Company All rights reserved

MB 021

Printed in U.S.A.