

1. Introduction

The Battery Monitor 1616-29, is a small module designed to provide supervision of supplementary 12 or 24 volt lead acid batteries (e.g. evacuation system batteries) in an automatic fire alarm system as required by New Zealand Standard NZS 4512. The module provides electrical isolation between the power supply to be supervised and the main power supply of the associated fire alarm control unit so that loop currents that inhibit accurate monitoring of the power supply can be avoided. An LED provides visible, latched indication of a low battery condition.

2. **Connection to Fire Alarm Systems**

(a) VIC 2, FP4000, FP4, FP1600, FC16 Fire Alarm Panels



NOTE:

Connect R- Terminal momentarily to 0 volts to reset Defect Indicator LED.

VIC 2, FP4000, connect Reset- on Battery Monitor to Reset- output from panel

FP1600, FC16 etc. connect Reset- on Battery Monitor to separate, normally open, reset switch.

The indicator on the Battery Monitor will reset on the application of power to the Main Power Supply terminals.

(b) VIC 1 Systems



3. Specifications

Defect Set Point of the Battery Supply to be Monitored:

12 volt lead acid battery:	12.2 volts (draws up to 6 mA from monitored supply)
24 volt lead acid battery:	24.4 volts (draws up to 6 mA from monitored supply)
Main Power Supply:	10 to 14 volts, 5 mA
	20 to 28 volts, 8 mA
Defect- (D-) Output:	Open Collector Transistor, 30 volts max.
	Closure to 0 volts, 20 mA max. when battery voltage low.
Transmit- (T-) Output:	Open Collector Transistor, 30 volts max.
	Clamp to 10 volts, 20 mA. max. when battery voltage low
PCB Dimensions (mm):	91 x 48
Terminations:	Screw Terminals, 2.5 mm ² max.