



# Series = SuperBrite™ Marquee Display

**SBMD** = SuperBrite™ Marquee Station Display;  
Fail-safe large display designed to integrate with any Vigilante AQS™, PLC, HMI or SCADA system;  
Tri-colour LED's arranged in eight addressable lines;  
Each line can be addressed by a digital register from a Vigilante AQS™ or Zephyr AQS™ or a custom user message by a webpage entry or a post request using JavaScript Object Notation (JSON);  
This functionality is done through the webpage configuration interface and does not require any other software;  
Total of eight lines, 2" character height, approximately 20 characters per line, alternating 2 pages of 4 lines;  
Universal power supply (85-264 VAC, 47-63 Hz, 1 amp maximum peak draw);  
CE Compliant

## 1 = Enclosure Type

**NR** = Not required. To be installed in a customer supplied enclosure.  
41"W x 14"H x 3"D  
(105 cm x 36 cm x 7.8 cm)  
20 lbs. (9 kg) weight.  
**SS** = NEMA 4X Stainless Steel enclosure c/w impact resistant Lexan window and stainless steel mounting lugs;  
51"W x 19"H x 3.5"D (127 cm x 53.5 cm x 9 cm)  
47 lbs. (22 kg) weight.  
\*\*\* TOTAL SHIPMENT WEIGHT AND DIMENSIONS INCLUDING PACKAGING IS 65 LBS - 26" X 55" X 9" (29.5 KG - 661 mm X 1397 mm X 229 mm).

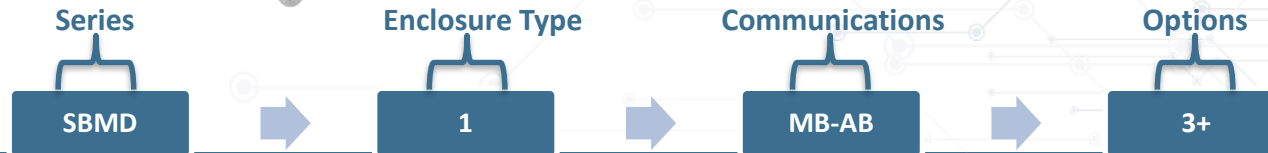
## 2 = Communications

**MB-AB** =  
Native on-board Modbus Ethernet TCP/IP and EtherNet/IP™ digital communications; RJ45 connection; Registers provided for tag name, tag value and tag units, LED colour and solid/flashing LED state; Three output SPDT (Form C) relays, 8 amp rated @ 250 VAC

## 3+ = Options

(Extend matrix as required)

**NR** = Options not required.  
**ESA** = ESA (Electrical Safety Authority) approval for general purpose applications.  
**CSA** = CSA special approval for general purpose applications.  
**EZN-E** = Wireless Ethernet.  
**EZN-LFV** = Leaky Feeder, VHF Radio modem.  
**EZN-LFU** = Leaky Feeder, UHF Radio modem.  
**NOTE 3:** SEE PAGE #26 FOR EZ Node™ WIRELESS DETAILS.





## EZ Node™ Wireless Node - Model Number Matrix

### Series = EZ Node™ Wireless Adapter



**EZN** = EZ Node™ Wireless Adapter

The EZ Node™ Wireless Adapter allows any Maestro product to connect directly to a wireless network.

Enclosure Specifications:  
NEMA 4X enclosure;  
ABS construction;  
Heavy duty aluminum back plate with stainless steel hardware.

### 1 = Options

**E** = Ethernet, IEEE 802.11b/g compliant, 2.4 GHz Wireless radio, PoE (Power over Ethernet), 1 X 10/100 BASE-TX (Cat. 5, RJ-45) Ethernet Interface, FCC Part 15.247, IC RS210 & CE Wireless approvals, RoHS Compliance c/w 3 dBi Omni-directional antenna, waterproof RJ45 connector and one 24 VDC power injector to be installed in any Ethernet based Maestro product, discovery tool, The EZ Node™ is configured through a simple web browser and requires no additional software.

**LFV** = Leaky Feeder, VHF Radio modem, 148 – 174 MHz, c/w unity gain stub VHF antenna, (Customer to provide upstream and downstream frequencies with order).

**LFU** = Leaky Feeder, UHF Radio modem, 450 – 480 MHz, c/w unity gain stub UHF antenna, (Customer to provide upstream and downstream frequencies with order).

**NOTE 1:** Leaky Feeder applications will require the Zephyr AQS™, Vigilante AQS™, EthernetI/O™ or SuperBrite™ Marquee Display to be configured with RS485 as the physical layer.

**NOTE 2:** Leaky Feeder applications will require a EZ Base™ Leaky Feeder Head End chassis and Protocol Converters.

Series

EZN

Options

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# Maestro Limited Warranty

High Grade Controls Corporation (High Grade) warrants that any Maestro Digital Mine (Maestro) equipment manufactured and sold by it will, upon shipment, be free of defects in workmanship or material. Should any failure to conform to this warranty become apparent during a period of one year after the date of shipment, High Grade shall, upon prompt written notice from the purchaser, correct such nonconformity by repair or replacement, EX Works factory of the defective part or parts. Correction in the manner provided above shall constitute a fulfillment of all liabilities of High Grade with respect to the quality of the equipment.

**THE FOREGOING WARRANTY IS EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES OF QUALITY WHETHER WRITTEN, ORAL, OR IMPLIED (INCLUDING ANY WARRANTY OF MERCHANTABILITY OF FITNESS FOR PURPOSE).**

The remedy(ies) provided above shall be purchaser's sole remedy(ies) for any failure of High Grade to comply with the warranty provisions, whether claims by the purchaser are based in contract or in tort (including negligence).

High Grade does not warrant equipment against normal deterioration due to environment.

Factors such as moisture, corrosive gases, solid particulates and DPM (diesel particulate matter) can be detrimental and can create the need for repair or replacement as part of normal wear and tear during the warranty period.

Gas sensors, on general, provides a useable service life of approximately one year. The absolute time depends on many environmental factors such as gas concentration levels, high level gas spiking, temperature, humidity and pressure. As such, High Grade, will provide a time based warranty of twelve (12) months from the date of shipment. For example, if a gas sensor fails after two (2) months, High Grade will provide a replacement sensor for 16.7% (2/12) of the replacement value. If the gas sensor fails after eleven (11) months, High Grade will provide a replacement sensor for 91.7% (11/12) of the replacement value and so forth.

Equipment supplied by High Grade but not manufactured by it will be subject to the same warranty as is extended to High Grade by the original manufacturer.

At the time of installation it is important that the required services are supplied to the system and that the sensors are protected from physical damage from moving equipment or water dripping or condensing on the electronics. The installation of proper electrical drip legs to prevent moisture from entering the electronic equipment is paramount.

All replacements or repairs necessitated by inadequate maintenance, normal wear and usage, unsuitable power sources or environmental conditions, accident, misuse, improper installation, modification, repair, use of unauthorized replacement parts, storage or handling, or any other cause not the fault of High Grade are not covered by this limited warranty, and shall be at Buyer's expense. High Grade shall not be obligated to pay any costs or charges incurred by Buyer or any other party except as may be agreed upon in writing in advance by High Grade. All costs of dismantling, reinstallation and freight and the time and expenses of High Grade's personnel and representatives for site travel and diagnosis under this warranty clause shall be borne by Buyer unless accepted in writing by High Grade. Goods repaired and parts replaced by High Grade during the warranty period shall be in warranty for the remainder of the original warranty period or ninety (90) days, whichever is longer.