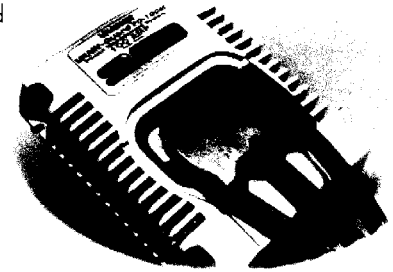


**VANNER**

**VANN-Guard Power Management System**

**One Product for Equalization/Monitoring/CAN-Bus Communication/Protection  
Eliminates Need for Additional Add-On Modules and Gateways**

The Vanner VANN-Guard power management system permits the operation of 12-volt loads from 24-volt electrical systems. With leading edge equalization technology and ergonomic design, the ever vigilant VANN-Guard will ensure optimized DC performance whatever the application. Combined with advanced system monitoring technology (through J-1939 CanBUS or Vanner's integrated battery monitor) the power management system is ideal for transit bus, private coach, tour bus and charter bus applications. Uses also include heavy trucks, off-highway equipment and even alternative energy solutions.



**Key Features**

- **Battery Equalizer with 24 Vdc to 12 Vdc Converter** (Extends battery life / Safe 12V connection)
- **System Monitoring Capability** (J1939 CanBUS / MUX interface capability)
- **60, 80, 100 Amp Models** (12 Vdc output)
- **Battery Cab Strain Relief System** (Assuring safe and secure DC connections)
- **Cast-Aluminum Housing** (Waterproof - mounts anywhere)
- **Vibration and Shock Resistant Design** (Built using proven anti-vibration process)
- **24/7 High Transient Surge and Load Dump Protection** (Protects entire electrical system)
- **Internal Fused Protected** (Self-Protecting)
- **Advanced Battery Cable Post Design** (Eliminates post-to-post arcing due to wrench contact)
- **Remote Sensing** (Able to be located anywhere on the vehicle/ More accurate equalization)
- **Lightweight Design - Only 6.5lbs.** (+5lb. weight savings over other units)
- **Factory Repairable** (Future factory refurbish program to lower cost of replacement units)

**VANN-Guard – Equalizers**

Model	Input Voltage	Maz Input Current (24Vdc)	Output Current	Dimensions	Weight
70-60	18-32 Vdc	32 Amps	0-60 Amps	10.6" H x 8.5" W x 3.6"D	6.5 lbs.
70-80		43 Amps	0-80 Amps		
70-100		53 Amps	0-100 Amps		

**VANN-Guard – Monitored Equalizers (Internal EM-70D Monitor)**

Model	Input Voltage	Maz Input Current (24Vdc)	Output Current	Dimensions	Weight
70-60M	18-32 Vdc	32 Amps	0-60 Amps	10.6" H x 8.5" W x 3.6"D	6.5 lbs.
70-80M		43 Amps	0-80 Amps		
70-100M		53 Amps	0-100 Amps		

**VANN-Guard – CAN-Bus Management System (SAE J-1939)**

Model	Input Voltage	Maz Input Current (24Vdc)	Output Current	Dimensions	Weight
70-60CAN	18-32 Vdc	32 Amps	0-60 Amps	10.6" H x 8.5" W x 3.6"D	6.5 lbs.
70-80CAN		43 Amps	0-80 Amps		
70-100CAN		53 Amps	0-100 Amps		