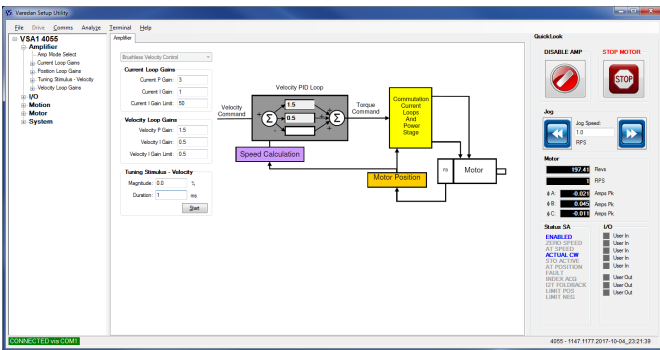


Model	Current Cont./Peak	Bus Voltage	Power Continuous
VSA2-1530	15/30 Amps	12- 400VDC	6KW

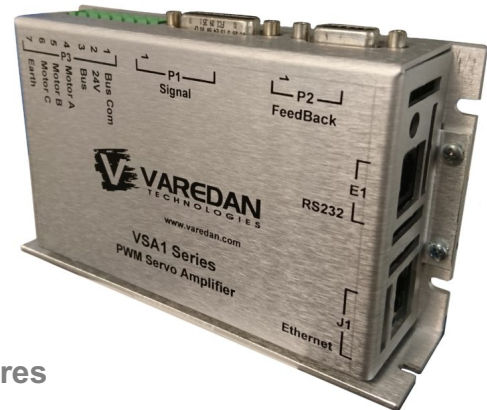
## Details

Varedan has a long history of providing reliable high performance linear servo amplifiers for OEM customers. Following that tradition, the VSA Digital PWM Servo Amplifier line extend our product offerings to include advanced digital controls, efficient power delivery, compact footprint, and simple to use tuning and configuration utilities while retaining the reputation for superior reliability and performance.

The PC based VaredanGUI™, with its built-in command stimulus and real-time oscilloscope signal tracer views, reduces the requirements for external equipment while setting up new systems. The standard Ethernet based communications easily connects with all modern computers. Full system configuration can be saved and uploaded for quick and easy drive provisioning.

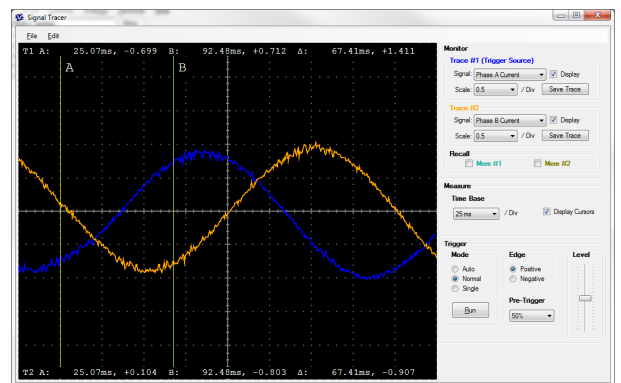


The VSA2-1530 features a powerful microprocessor to provide reliable, high-precision motor control, stored motion profiles, and real-time scope functionality. The VSA2-1530 features all standard modes of operation, from current (torque) mode to position mode, and includes external sine commutation mode for compatibility with advanced controllers and legacy applications. All standard forms of encoder feedback plus an auxiliary quadrature port can be utilized, giving the user the high level of flexibility and freedom.



## Features

- 24V Keep Alive Option
- Fully Opto-Isolated I/O
- Up to 60kHz PWM Rate
- Digital Current/Torque, Velocity and Position Control
- Single and 3-Phase; Linear, Rotary, and Voice Coil Motors
- Ethernet and RS232 Communications (Optional)
- Dual Feedback Ports, Input & Output, Supporting Halls, Quad, Sine and Absolute Digital Encoders
- PC Based VaredanGUI™ for configuration and tuning
- Supports ABSine 2-Phase External Commutation for 3-Phase Motors
- Output Filter Board (Optional)
- Expansion Interface Board (Optional)



Real-time oscilloscope for Easy Setup

**OUTPUT CONNECTIONS**

3 Digital Outputs, Opto-Isolated (Sink or Source), 5-24V,  
Up to 100mA load current  
1 Analog Output, 0-5V  
Ethernet (UDP) - Transmit  
RS232 – Transmit (Optional)

**INPUT CONNECTIONS**

5 Digital Inputs, Opto-Isolated (Sink or Source), 5-24V  
2 Analog inputs, Differential, ±10V  
Ethernet (UDP) - Recieve  
RS232 – Receive (Optional)

**FEEDBACK**

**Primary Feedback Port:**

Incremental Quadrature Input (Differential),  
Analog Sine/Cos Input (Differential), BiSS,  
EnDat, Step/Direction Input

**Auxiliary Feedback Port:**

Incremental Quadrature Input/Output (Differential),  
Synthesized Quadrature Output (Differential),  
3 Additional Differential Digital I/O

**Halls (Digital):**

3 Inputs U,V,W (Single Ended)

**KEEP ALIVE VOLTAGE (Optional)**

24VDC

**MECHANICAL**

Dimensions: 7.125" x 4.60" x 1.45"  
Weight: 0.94 Pounds

**PWM POWER STAGE**

Phases: 3-Phase MOSFET Based Power Section  
Modulation: Center Based Modulation  
Switching Frequency: 20kHz, 40kHz, 60kHz  
Current Loop Bandwidth: Up to 4kHz (dependent on  
switching frequency and motor parameters)

**OPERATIONAL MODES**

1-Phase CurrentTorque  
3-Phase Current/Torque (Internal Commutation)  
3-Phase ABSine Torque (External 2-Phase Commutation)  
Velocity Contol  
Position Control  
Step/Direction  
Stored Motion  
Cam/Following

**FAULT PROTECTION**

**Amplifier Protection Features**

Under-Voltage Protection  
Over-Voltage Protection  
Over-Temperature Protection  
Over-Current Protection  
Short Circuit Protection

**Motor Protection Features**

Motor Over-Temperature Input (NTC, PTC)  
Continuous Current Limit (I2T)  
Peak Current Limit

**OPTIONAL FEATURES**

**Output Filter Board**

-3dB Roll-Off Frequency	Peak Current	Max PWM Frequency
2MHz	10A	60kHz
715kHz	10A	20kHz

**Expansion Interface Board**

RS232 Serial Input/Output

**ENVIRONMENTAL LIMITS**

0 to 70 deg. C Ambient  
-40 to 85 deg. C Storage  
5 to 95% Relative Humidity. Non-condensing.

Varedan Technologies warrants this product to be free from defects for a period of one year after the date of shipment and according to the Terms and Conditions of Sale.