

# Vantage Pro™ Operating Specifications

The following tables detail the Vantage PRO™ unit operating specifications for:

- Scope capabilities
- Test instrument capabilities

## Scope Capabilities

The following tables detail the Scope capabilities for:

- Analog to digital (A/D) conversions
- Horizontal sweep and frame storage

Table 1-1 Scope: Analog to digital conversions

FUNCTION	RANGE	ACCURACY/COMMENTS
Channels	2	Common grounds
Sample Rate	8 MSPS	Maximum
Resolution	12Bits	

Table 1-2 Scope: Horizontal sweep and frame storage

SWEEP	DATA POINTS PER CHANNEL	BUFFER STORAGE PER CHANNEL <sup>1</sup>
50uS	200	1310 screens (262,000 data points)
100uS–20S	250	1048 screens (262,000 data points)
<sup>1</sup> Buffer storage consists of contiguous screens of 2 channel data.		

## Test Instrument Capabilities

Test instrument capabilities are shown in the table belows.

Table 1-3 Test Instrument capabilities (Sheet 1 of 4)

FUNCTION	RANGE	RESOLUTION	ACCURACY <sup>1</sup>
Amps (Internal)	100mA	0.001A	+(1.5% + 2 digits)
	200mA		
	500mA		
	1A		
	2A	0.01A	+(1.0% + 2 digits)
	5A		
	10A		
<sup>1</sup> Accuracy, measured at 25°C, is shown as ± (% of reading) + (Number of least significant digits). For example, accuracy reading a 100V DC signal would be ± (0.25% + 2 digits), or 99.75 to 100.25 ± 2 digits; or 99.73 to 100.27.			

Table 1-3 Test Instrument capabilities (Sheet 2 of 4)

FUNCTION	RANGE	RESOLUTION	ACCURACY <sup>1</sup>
Diode/ Continuity	2.5	0.002V	+(1.0% + 2 digits)
Duty-cycle	20	1Hz–1500Hz: 0.1%	1Hz–9kHz+(1%+ 2 digits) 9001Hz–20kHz +(2% + 2 digits)
	40	1501Hz– 3000Hz: 0.2%	
	60	3001Hz– 7500Hz: 0.5%	
	80	750Hz–15kHz: 1%	
	100	15001Hz– 20kHz: 1.5%	
Frequency Hz	5	0.01Hz	+(0.25% + 2 digits)
	10		
	50		
	100	0.1Hz	
Frequency Hz (continued)	250	0.1Hz	+(0.5% + 2 digits)
	500	1Hz	
	1000		
	2000	3Hz	
	5000	20Hz	+(1.5% + 2 digits)
	10000	100Hz	
	20000	300Hz	+(3.5% + 2 digits)
	50000	1800Hz	
Ignition scope	5000	5V	—
	10000		
	15000	50V	
	2000		
	5000		
MC Dwell degrees	20	0.1°	+(0.5% + 2 digits)
	40		
	60		
Ohms	40	0.05	+(1.5% + 2 digits)
	400	1	
	4k	10	
	40k	100	
	400k	1k	
	4M	10k	+(2.0% + 2 digits)
<sup>1</sup> Accuracy, measured at 25°C, is shown as ± (% of reading) + (Number of least significant digits). For example, accuracy reading a 100V DC signal would be ± (0.25% + 2 digits), or 99.75 to 100.25 ± 2 digits; or 99.73 to 100.27.			

Table 1-3 Test Instrument capabilities (Sheet 3 of 4)

FUNCTION	RANGE	RESOLUTION	ACCURACY <sup>1</sup>
Pulse-Width	0.005S	0.01mS	+(1.7% + 2 digits)
	0.01S		
	0.025S		
	0.05S		
	0.1S	0.1mS	+(0.1% + 2 digits)
	0.25S		
	0.5S		
	2S	1mS	
RPM 2-cycle (inductive)	—	1 RPM	+(0.3% + 2 digits)
RPM 4-cycle (inductive)	—	1 RPM	+(0.3% + 2 digits)
Secondary RPM	—	1 RMP	+(0.3% + 2 digits)
		10 RPM	
Volts AC RMS	0.1	0.1mv	+(1.5% + 4 digits)
	0.2	0.001V	
	0.5		
	1		
	2	0.01V	
	5		
	10		
	20	0.1V	
	50		
Volts DC (Channel 1)	0.1	0.1mV	+(1.0% + 2 digits)
	0.2	0.001V	
	0.5		
	1		
	2	0.01V	
	5		
	10		
	20	0.1V	
	50		
	100		
	200		
	<sup>1</sup> Accuracy, measured at 25°C, is shown as ± (% of reading) + (Number of least significant digits). For example, accuracy reading a 100V DC signal would be ± (0.25% + 2 digits), or 99.75 to 100.25 ± 2 digits; or 99.73 to 100.27.		

Table 1-3 Test Instrument capabilities (Sheet 4 of 4)

FUNCTION	RANGE	RESOLUTION	ACCURACY <sup>1</sup>
Volts DC (Channel 2)	0.1	0.1mV	+(1.0% + 2 digits)
	0.2	0.1mV	
	0.5	0.001V	
	1	0.001V	
	2	0.001V	
	5	0.01V	
	10	0.01V	
	20	0.01V	
	50	0.1V	
	100		
	200		
Volts DC Transducer inputs	—	0.0025V	+(1.0% + 2 digits)
<sup>1</sup> Accuracy, measured at 25°C, is shown as ± (% of reading) + (Number of least significant digits). For example, accuracy reading a 100V DC signal would be ± (0.25% + 2 digits), or 99.75 to 100.25 ± 2 digits; or 99.73 to 100.27.			