



**Vitrek Corporation**  
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## Power Analyzer Comparison

Features	Vitrek			Yokogawa		
	PA900	PA910	PA920	WT1800E	WT3000E	WT5000
# Channels per chassis	1-4	1-4	1-4 <sup>1</sup>	1-6 <sup>1</sup>	1-4 <sup>1</sup>	1-7 <sup>1</sup>
Multi-Unit Operation	Up to 1000 units measurement sync and efficiency grouping			2 units measurement sync		4 units measurement sync
Base Accuracy (Watts)	0.045% reading no adder for range	0.045% reading no adder for range	0.024% reading no adder for range	0.03% rdg. + 0.05% range <sup>2</sup>	0.01% rdg. + 0.03% range <sup>2</sup>	0.01% rdg. + 0.02% range <sup>2</sup>
A/D Converter	22 bits	24 bits	24 bits	16	16	18
Sample Rate	910kS/s	1.2MS/s	1.2MS/s	2MS/s	200kS/s	10MS/s
Effective Sample Rate	384MS/s	384MS/s	384MS/s	2MS/s	200kS/s	10MS/s
Measurement Bandwidth	up to 5MHz (-3dB)			up to 5MHz (-3dB)	1MHz max	up to 10MHz (-3dB)
Harmonics Capability	up to 500th (~435kHz Max)	up to 500th (~600kHz Max)		up to 500th (~300kHz max) <sup>3</sup>	up to 100th (~60kHz max) <sup>3</sup>	up to 500th (1.5MHz max) <sup>3</sup>
Max Harmonic Fundamental	435kHz	590kHz		2.6kHz <sup>3</sup>	2.6kHz <sup>3</sup>	300kHz <sup>3</sup>
Max continuous Voltage	1,000V RMS	1000V RMS	1,625V RMS 3,300 V Peak	1,000V RMS	1,000V RMS	1,600 V Peak
Interface	USB, LAN, RS-232C, GPIB <sup>3</sup>			LAN, USB, GP-IB, VGA <sup>3</sup>	RS-232 <sup>3</sup> , LAN <sup>3</sup> , USB <sup>3</sup> , GP-IB, VGA <sup>3</sup>	LAN, USB, GP-IB, VGA
Graphical History	up to ~500 parameters always recording (2ms to 584 million years)			Not provided.		
Built In Compliance Testing	EN50564, EN61000-3-2/-12, User specified harmonic limits, and more.			Optional software and PC required.		
Data Update	up to 2ms (10ms without increased error)			up to 50ms (200ms without increased error)		
Motor Input (optional)	Speed/ Torque/Direction (Analog or Digital) <sup>3</sup>			Torque/A/B/Z (Analog/Digital) <sup>3</sup>	Speed/Torque (Analog/Digital) <sup>3</sup>	Torque/A/B/Z (Analog/Digital) <sup>3/4</sup>
Dimensions, weight	5.5 X 9.75 X 11.2" 7 lbs.	5.5 X 9.75 X 11.2" 7 lbs.	5.5 X 9.75 X 11.2" 7 lbs.	16.75" X 18 X 7" ≈33 lbs.	16.75" X 16.8 X 7" ≈33 lbs.	16.75" X 16.8 X 7" ≈33 lbs. <sup>5</sup>
Pricing	\$6,695.00	\$10,475.00	\$15,875.00	≈17,000 <sup>6</sup>	≈\$21,000 <sup>6</sup>	≈27,000 <sup>6</sup>

\*\* See Additional Notes on Page 2.



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**Additional Notes:**

- <sup>1</sup> Must be factory configured for specific channel count. Reconfiguring or increasing channel count requires return of the unit to the factory
- <sup>2</sup> Accuracies specified for 6 months, Vitrek accuracies specified for 2 years. See power accuracy curve on other side for conditions which affect accuracy
- <sup>3</sup> Factory installed option required.
- <sup>4</sup> WT5000 available with 2 sets of MTR options.
- <sup>5</sup> Weight only includes main unit only with /M1/MTR1/DA20 installed. Additional ~1-2lbs. Per element
- <sup>6</sup> To be used only as a guide. Pricing subject to change. Optional features /option may apply.

**Power Accuracy Curve**



**WT5000 Test Conditions**  
Temperature: 23°C±5°C  
Humidity: 30%RH to 75%RH  
Input waveform: Sine wave  
 $\lambda$  (power factor): 1  
Crest factor: CF3  
Sync source signal level: Same as the frequency measurement conditions  
Wired condition after zero-level compensation or measurement range change.  
45Hz – 66Hz