





VPAC™II IS | Intrinsically Safe Through-Valve Loss Control Instrument



MISTRAS Group has taken the VPAC™ through valve loss control instrument to the next level. The VPAC™II IS significantly simplifies asset maintenance and increases operation safety.

Created for use in hazardous environments such as oil, gas and petrochemical plants, power generating plants and offshore platforms, the VPAC™II IS is a dedicated intrinsically safe acoustic leak instrument for through valve loss control. Using the same technology and sensors as our successful VPAC™, the VPAC™II IS, for example, can determine the loss of hydrocarbons to flare in hazardous areas and save millions of dollars for the plants.

Starting with basic process information and type of valve, along with the measured Average Signal Level (ASL) from the instrument, VPACTMI IS uses a proprietary algorithm to identify through-valve gas losses and estimates leak rate.

The user interface is simple and intuitive. The instrument is powered by a high capacity rechargeable battery lasting several weeks with typical use. The battery replacement on this handheld power device is quick and easy, and the unit retains all settings even when powered off, so downtime is minimal.

CAPABILITIES

The VPAC™II IS contains all the features you need to determine if valves are leaking and an estimation of the leak rate. The features of the VPAC™II IS include:

- Leak rate estimations right on the unit itself, based on stored valve information.
- Low noise electronics to achieve the required dynamic range for valve monitoring.
- Storing a reading, as well as an upstream and downstream readings.
- Measurement mode displays the real-time reading on current valve
- Loading a testing route complete with valve names and physical properties from VPACwin™.
- The ID mode enables the user to select an active valve and view its parameters.
- Transferring all stored data to VPACwin™ via the Bluetooth interface
- Meets the requirements of EPA 40 CFR 98 mandatory tracking and reporting of greenhouse gases

SAVINGS IN MILLIONS

Statistical experience has shown that in oil and gas plants 5-10% of valves leak, but 1% of valves are responsible for 70% of total loss. Finding these valves and taking remedial action reduces annual losses by millions of dollars.

On plants with flare gas recovery systems the use of the system is even more important to avoid burning saleable product and hydrogen as fuel gas. Regular checking of product and hydrogen valves avoids this downgrading.

SAVINGS EXAMPLE

VOC losses AU\$9m (28,684 tonnes) [~US\$12m], cut to half (14,342 tonnes) in two years, cut to 4821 tonnes in three years.

CERTIFICATIONS

C € € II 2(1) G FM Class I Div 1 Group A, B, C, D, T3 CFM Class I Div 1 Group A, B, C, D, T3; Ex ia IIC T3 Gb







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		1 VALVE27	12			27	3.8		Sell	Hard	LIQUIDUS	2/25/53 10:52 AM	3.4	7.2	54.2	1.30	2.3	\$550.00	\$1,284
9		2 A6C123	23			999	68.0		Bell	Soft	DQUIDES	2/25/33 10:52 AM	0.5	1.2	8.7	1.30	0.4	56.50	52
20		5 GOOB11	21	30	21	118	8.0		Other	Hard	UQUIDUS	2/25/11 10:52 AM	0.3	0.6	4.6	1.30	0.2	\$122.00	\$24
		# BEBAA	14			43	3.1		Other	Hard	GASER	2/25/33 10:52 AM	329.1	718.3	5374.8	1.30	231.7	\$420.00	597,304
		\$ 800-708	77			77	5.2		Sell	Hard	LIQUID LB	2/25/33 10:52 AM	140.3	297.3	2224.4	1.55	114.3	\$420.00	\$48,004
		6 XYZ #DQ	32			- 65	4.4		Sell	Hard	GASTE	2/25/33 10:52 AM	65.2	138.2	1034.0	1.15	35.4	5420.00	\$16,560
14		7 EAA33	33			3234	83.5		tell	568	UQUDIS	2/26/33 10:52 AM	0.1	0,3	2.2	1.15	0.1	5420.00	536
15		B BIOGIEZ	42			1777	130.9		tell	50ft	UQUELS	2/26/11 10:52 AM	0.8	1.7	13.1	1.15	0.5	5423.00	\$310
26		9 LAGUQ	13			54	3.7		Sell	Soft	UQUIDIS	2/26/11 10:52 AM	0.5	1.0	7.2	1.15	0.3	\$422.00	\$116
17		0 81/05	,			2112	75.6		Ball	Hard	GAS	2/26/33 10:52 AM	0.3	0.7	5.4	2.20	0.4	\$420.00	\$367
28		1 HVM-99	15				5.0		Other	Hard	GAS .	2/26/11 10:52 AM	1.9	4.0	29.8	2.50	2.5	\$600.00	\$1,484
12		50EDCH 2	99			567	67.1		Cete	Hard	GAS		22260.1	47160.3	352867.5	1.66	19421.5	5500.00	59,710,996
20		DANTS67	34			42	2.5		Cate	Hard	GAS	2/27/11 10:52 AM	32.6	69.1	517.0	1.66	28.5	\$600.00	\$17,073
		4OE	22			48	3.3		Other	Hard	GAS	2/27/11 10:52 AM	6.1	12.9	96.4	1.66	5.3	5600.00	53,583
22	12	5 98744	56			45	4.4	. 4	Other	Hard	UQUE	2/27/11 10:52 AM	4.4	9.2	65.3	2.07	4.7	5430.00	52,641
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VPACWIN™ SOFTWARE

- With a few simple mouse clicks, you can connect to your VPACII™ IS via Bluetooth and transfer data to and from the unit.
- Automatically loads and formats all data transferred from VPACII™ into a userfriendly spreadsheet.
- Leak rates and total monetary loss per valve, per year are calculated.
- Route Management features enable the user to load a specific set of valves to be tested onto the unit.
- · Entire databases of valves can be created and saved for future use.
- Saved results over time can be used for trending purposes.
- Save, load, print, & modify values in leak rate calculation spreadsheets.
- Firmware upgrades, when available, supported over a Bluetooth interface
- 40 CFR 98 Results can be transferred from the unit into a spreadsheet that supports leak rate calculations for standard cubic feet per hour for EPA mandatory greenhouse gas reporting

KEY FEATURES

- · Large custom LCD backlit display
- Dual frequency range selection
- Accepts many types of sensors
- Slide-in molded NiMh battery pack
- Small, rugged, ergonomic package
- Simple, intuitive user interface via a large button keypad
- Bluetooth data transfer



Visit www.mistrasgroup.com/VPACII

VPAC™ II IS SPECIFICATIONS:

Size: (LxWxH)	4.75" x 1.4" x 7"
Weight:	1 lb.
Power Source:Nickel Met	tal Hydride Battery Pack
Battery Life:	> 100 Hours
LCD:	ransflective LCD on Glass
Backlight:	Blue LEDs with diffuser
Wireless Interface Type:	Bluetooth Class B
Wireless Interface Range:	50ft
Operating Temperature:	-15°-158° F (-20°-55° C)
Storage Temperature:	-40°-185° F (-40° - 85°C)

SPECIFICATIONS FOR SENSORS:

D9203-IS * High Frequency Response Size:	0.9" x 0.8"
Temperature:	40° - 70° C
D9241-IS * Low Frequency Response Size:	0.9" x 0.8"
Temperature:	40° - 70° C
VS9203-IS * High Frequency Response Size:	0.9" x 0.8"
Temperature:	40° - 70° C

VPAC™ II IS PACKAGE INCLUDES:

- The VPAC™II IS unit
- Two D9203-IS sensors (VPAC sensor)
- Wave guide for the D9203-IS sensor
- VS9203-IS sensor (Valve-Squeak sensor with built in waveguide)
- · Carrying case and carrying straps
- Bluetooth USB Mini Adapter
- VPAC II Rechargeable Battery Pack
- Battery charger with power adaptor and replaceable plugs
- User Manual & VPACwin™ software
- USB License Key

WORLDWIDE HEADQUARTERS:

195 Clarksville Rd •

Princeton Jct, NJ 08550 • USA

T: +1.609.716.4000 • F: +1.609.716.0706 E-MAIL: sales.systems@mistrasgroup.com CANADA CHINA FRANCE GERMANY GREECE

T: +1.403.556.1350 T: +86.10.5877.3672 T: +331.498.26040

T: +49.211.73094.0 T: +30.210.2846.801 **HOLLAND** INDIA JAPAN MIDDLE EAST RUSSIA

T: +31.010.245.0325 T: +91.22.2586.2444 T: +81.33.498.3570 T: +44(0)1954.231.612 T: +7495.789.4549

S. AMERICA IIK

SCANDINAVIA T: +46(0)31.252040 T: +55.11.3082.5111 T: +44(0)1954.231.612