

# GE MEASUREMENT & CONTROL <Industrial Pressure application>

# GE RVI <Industrial borescope application>



**Korean: Mr. Na In Kang (+84-12-3325-1049) - Vietnamese: Mr. Hung (+84-978-190-642)**  
**Tel: 84-4-3212-3727 - Fax: 84-4-3212-3728**  
**Address: Lot 4-BT3, Trung Van, Nam Tu Liem, Hanoi, Vietnam**

## NIVINA CO., LTD - GE AUTHORIZED CHANNEL PARTNER

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→Multi-Function Calibrator

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→Pressure Calibrator

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→Pressure Indicator

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→Pressure Controller

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→Pressure Hand pump

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→Air Data Test System

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→Sensor, Probes, Depth/Level

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→Pressure Transducer/Transmitter

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### GE MEASUREMENT & CONTROL

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→Industry: Heat exchanger, Gear box, defect detection and measurement ...

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→Oil & gas: Piping, transmission, gas compression equipment ...

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→Aviation: Turbine inspection, airframe inspection, blade defect detection and measurement ...

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### GE RVI <Industrial borescope >

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# 01. Pressure Sensors

GE's Silicon technology is robust, compact and provides excellent performance characteristics. Our dedicated manufacturing plant is one of only a few worldwide that converts raw silicon into finished products. A multidisciplinary engineering team designs all aspects of the product to best meet the requirements of a variety of demanding markets, applications and industries. GE provides a complete solution for pressure measurement.

## Applications:

- Compressor control and monitoring
- Automotive engine development
- Turbine monitoring and control
- Flight test
- Hydrostatic level monitoring
- Critical hydraulic system control



# 01. Pressure Sensors<UNIK 5000 SERIES>

## UNIK 5000 PRESSURE SENSOR SERIES

- Ranges from 70 mbar to 700 bar (1 to 10,000 psi)
- Accuracy  $\pm 0.2$  to  $0.04$  % FS
- Stability  $\pm 0.05$  % FS typical
- mV, mA, voltage and configurable voltage outputs
- Multiple electrical & pressure connector options
- Operating temperature ranges to  $-55$  to  $125$  °C ( $-67$  to  $257$ °F)
- Short Lead time



To create your pressure sensor from the vast amount of variations, visit our online configuration tool [www.unik5000.com](http://www.unik5000.com) then select micro site. The configuration tool guides the user through the process of choosing the sensor most appropriate to the application

### UNIK 5600/5700

- Ranges from 70 mbar to 700 bar (1 to 10,000 psi)
- Milliamp output
- Accuracy  $\pm 0.2$  to  $0.04$ % FS
- Body diameter 25 mm (1in)
- All-welded 316L stainless steel or titanium construction
- Hazardous area approvals DIN 43650 or fully submersible electrical connectors

### UNIK 5800/5900

- Ranges from 3.5 bar to 700 bar (51 to 10,000 psi)
- Milliamp, millivolt and voltage outputs
- Accuracy  $\pm 0.2$  to  $0.04$ % FS
- 316L Stainless Steel construction
- Hazardous area approvals
- Integrated terminal compartment (5900)

# 01. Pressure Sensors<1800 Series>

## 1800 Series - Druck High Performance Level Pressure Sensors

- Ranges from 0.75 mH<sub>2</sub>O to 600 mH<sub>2</sub>O
- Accuracy ±0.10% full scale (FS) best straight line (BSL)
- Fully welded 17.5 mm diameter titanium construction
- Polyurethane and hydrocarbon resistant cables
- Full range of installation accessories



### PTX 1800

4 to 20 mA, proportional for zero to FS pressure

### Common Mode Voltage - PDCR 1800

Typically +3.5 V to +9 V

with respect to the negative supply

### Output Impedance - PDCR 1800

2 kΩ nominal

### Performance Specification

#### Accuracy

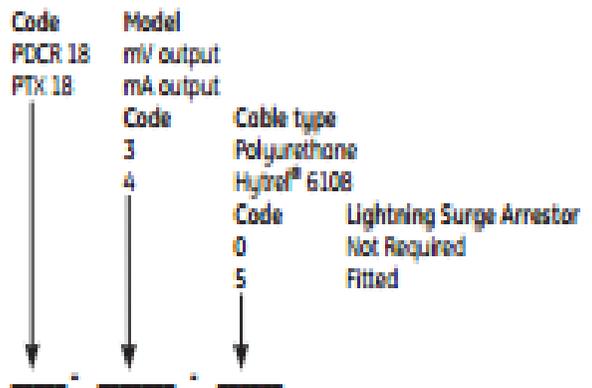
Combined effects of non-linearity, hysteresis and repeatability:

- *Standard*: ±0.1% FS BSL maximum
- *Option D*: ±0.06% FS BSL maximum (±0.08% FS BSL max. for 1 mH<sub>2</sub>O and below)

### Ordering Information

Please state the following:

- (1) Select model number
- (2) Pressure range and scale units
- (3) Options (if required)
- (4) Cable length required
- (5) Accessories (order as separate items)
- (6) Supporting Services (order as separate items)



# 01. Pressure Sensors<8000 Series>

## RPS/DPS 8000 High Accuracy Resonant Pressure Sensor

- Designed with brand new TERPS technology
- High precision,  $\pm 0.01\%$  FS over compensated temperature range
- High stability,  $\pm 100$  ppm FS/year
- Multiple output configurations, TTL and Diode, RS 232 and RS 485
- Wide selection of pressure and electrical connections to suit specific requirements

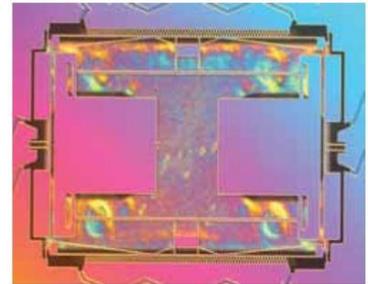
### 8000

- Ranges from 2 bar to 70 bar (30 to 1000 psi)
- Welded 316L media isolated construction, suitable for use in harsh environments
- Wide temperature range,  $-40\text{ }^{\circ}\text{C}$  to  $+85\text{ }^{\circ}\text{C}$  ( $-40\text{ }^{\circ}\text{F}$  to  $185\text{ }^{\circ}\text{F}$ )



### 8100

- Exposed silicon construction
- Barometric pressure precision to 0.1mbar (0.1hpa)
- Ranges from 1 to 3.5 bar (15 to 50 psi)
- Low g sensitivity
- Wide temperature range,  $-40\text{ }^{\circ}\text{C}$  to  $+85\text{ }^{\circ}\text{C}$  ( $-40\text{ }^{\circ}\text{F}$  to  $185\text{ }^{\circ}\text{F}$ )



### 8200

- Welded Hastelloy C276 media isolated construction, suitable for use in harsh environments
- Ranges from 2 bar to 70 bar (30 to 1000 psi)
- Wide temperature range,  $-40\text{ }^{\circ}\text{C}$  to  $125\text{ }^{\circ}\text{C}$  ( $-40\text{ }^{\circ}\text{F}$  to  $257\text{ }^{\circ}\text{F}$ )
- 8300 model is full Hastelloy C276 construction

### Base Pressure Ranges

- 0 to 2 bar (0 to 30 psi) absolute
- 0 to 7 bar (0 to 100 psi) absolute
- 0 to 14 bar (0 to 200 psi) absolute
- 0 to 20 bar (0 to 300 psi) absolute
- 0 to 35 bar (0 to 500 psi) absolute
- 0 to 70 bar (0 to 1000 psi) absolute

Code Number	Description	Max Operating temp range		IP rating
		$^{\circ}\text{C}$	$^{\circ}\text{F}$	
0	No Connector	-55 to +125	-67 to +257	-
1	Cable Gland	-40 to +80	-40 to +176	65
2	Raychem Cable	-55 to +125	-67 to +257	65
3	Polyurethane Depth	-40 to +80	-40 to +176	68
4	Hytrek Depth	-40 to +80	-40 to +176	68
6	Bayonet MIL-C-26482	-55 to +125	-67 to +257	*
C	1/2 NPT Conduit	-40 to +80	-40 to +176	67
G	M12 X 1 5-pin	-55 to +125	-67 to +267	*
H	PTFE Cable (Orange)	-55 to +125	-67 to +267	54

## 02. Portables

GE offers high precision field portables to commission, maintain, and calibrate the high accuracy and smart instrumentation used in today's process industry. These portables help to ensure control instrumentation can perform to closer tolerances, increasing both quality and productivity and providing a guaranteed level of accuracy and a lower cost of ownership. Environmental and regulatory requirements are an integral part of today's modern manufacturing processes and quality compliance is an important aspect. Our range of pressure temperature and multifunction portables make it easier for test and maintenance personnel to comply with all necessary requirements. Quality compliant records are easily achieved and the errors associated with manual documentation are eliminated.

### Applications:

- Testing, commissioning and calibrating process instrumentation
- Electrical, frequency, pressure and temperature
- Transmitters and transducers
- Gauges, indicators and recorders
- Switches, trips and alarms
- Positioners and converters

### Common Features:

- Built-in pressure/vacuum generation
- Simplified menu-driven operation
- ISO 9000 systems compatible
- Compact, rugged and self contained
- Downloads procedures, uploads results
- Identifies calibration errors in the field
- Records user ID, tag and serial numbers



## 02. Portables <DPI 620 Genii - 1>

### DPI 620 Genii

- Multi-function capabilities: electrical, frequency, temperature and pressure
- Optional HART and Foundation Fieldbus Communicators
- ATEX and IECEx approved for hazardous area use
- Modular re-rangeable and expandable concept
- Individual components can be used as stand-alone instruments
- Allows significant inventory reductions
- Simplifies training and improves operator safety
- Reduces cost of ownership



#### Advanced Modular Calibrator

- One touch selection of common tasks, e.g. P to I for a pressure transmitter
- Highest accuracy for measuring, sourcing and simulating electrical, frequency, temperature and pressure
- Simulate device inputs and measure outputs simultaneously (up to 6 active channels)
- Calculates errors between inputs/ outputs
- Pressure system generates 100 bar/1,500 psi pneumatic and 1000 bar/15,000 psi hydraulic pressures.
- Interchangeable pressure modules from 25 mbar/10 inH2O to 1,000 bar/15,000 psi

#### Pressure Generation Stations

- There are three pressure generation stations:
- PV 621/G, a pneumatic pressure generator for pressures 95% vacuum to 20 bar (300 psi);
  - PV 622/G, a pneumatic pressure generator for pressures 95% vacuum to 100 bar (1500 psi);
  - PV 623/G, a hydraulic pressure generator for pressures up to 1000 bar (15000 psi).
  - Each pressure station is designed for stand-alone operation as a pressure generator and can replace conventional hand pumps to provide greater efficiency and ease of use

#### PM 620 Pressure Modules

- Fully interchangeable with no need for set-up or calibration
- Simple screw fit - hand tight no tools required
- Ranges from 25 mbar to 1000 bar (10 inH2O to 15000 psi)
- Accuracy from 0.005% FS
- The PM 620 is the latest development in digital output sensor technology incorporating a number of key innovations to allow pressure re-ranging of compatible equipment.

## 02. Portables <DPI 620 Genii - 2>

### Gauge Ranges(referenced to Atmosphere)

		MEDIA	NLH&R (20 ± 2 <sup>0</sup> C) (68 ±4 <sup>0</sup> F) 24h	NLH&R (0 to 50 <sup>0</sup> C) (32 to 122 <sup>0</sup> F) 24h	Total Uncertainty (0 to 50 <sup>0</sup> C) (32 to 122 <sup>0</sup> F) for 1 year
			GAUGE	GAUGE	GAUGE
bar	psi		%FS	%FS	%FS
±0,025	± 10 inH2O	1	0.090	0.090	0.100
±0,07	±1	1	0.025	0.030	0.047
±0,2	±3	1	0.020	0.027	0.045
±0,035	±5	2	0.020	0.025	0.044
±0,7	±10	2	0.015	0.020	0.041
±1	-14,5 to 15	2	0.015	0.020	0.041
-1 to 2	-14,5 to 30	2	0.015	0.020	0.025
-1 to 3,5	-14,5 to 50	2	0.010	0.020	0.025
-1 to 7	-14,5 to 100	2	0.010	0.020	0.025
-1 to 10	-14,5 to 150	2	0.005	0.020	0.025
-1 to 20	-14,5 to 300	2	0.005	0.020	0.025
0 to 35	0 to 500	2	0.005	0.020	0.025
0 to 70	0 to 1000	2	0.005	0.020	0.025
0 to 100	0 to 1500	2	0.005	0.020	0.025
0 to 135	0 to 2000	2	0.005	0.020	0.025
0 to 200	0 to 3000	2	0.005	0.020	0.025



### HART Digital Communicator

- View, change, clone and store HART device configurations
- Work off-line to create and change HART configurations
- Transfer HART device configurations to your PC
- Measure and source analogue variables without secondary calibration equipment
- No power during shutdown? Genii provides 24 V
- Need a 230 ohm resistor? Just select from the menu
- It's easy to upgrade Genii with free of charge software and the latest HART device description libraries

### Fieldbus Foundation

- Offers engineers a full range of options for newer plants as well as more traditional infrastructures
- It's easy to upgrade Genii with the latest Foundation Fieldbus device description libraries

### Documenting Features

- Automate calibration procedures and document As Found and As Left results
- Store a complete plant database including tags, devices and procedures
- Graphical views of data log files, calibration results and historical trends
- Includes Windows CE – view loop diagrams, datasheets, safety procedures, spread sheets, images and create text documents
- EEE 802.11g wireless connection with Internet access
- Bluetooth and USB connectivity

## 02. Portables <DPI 611/DPI 612 Flex Series>

### DPI 611 - Precision Portable Pressure Calibrator

This fully self-contained pressure test and calibration system combines pressure generation, signal measurement and loop power to provide all the convenience of the Druck DPI 610/615 and yet it's half the size, twice as accurate and easier to use.

- 50% smaller and 33% lighter than the DPI 610
- Generates 0 to 20 bar/300 psi in less than 30 seconds
- Creates 95% vacuum
- Pressure measurement is twice as accurate
- Three times better electrical accuracy



### DPI 612 Flex Series - Range Flexible Pressure Calibrators

These fully self-contained pressure test and calibration systems have interchangeable pressure modules for flexible ranging, generate pneumatic or hydraulic pressures, measure process signals and supply loop power. They provide all the convenience of the Druck DPI 610/615 series with significantly improved generation capabilities, higher accuracy and simplified touch screen operation

- The complete pressure calibration tool: pump, measure, analyze
- Best in class pressure accuracy
- 20 bar/300 psi in 30 seconds
- 100 bar/1500 psi without gas bottles and regulators
- 1000 bar/15000 psi hydraulic pressure



## 02. Portables <DPI 880 Series>

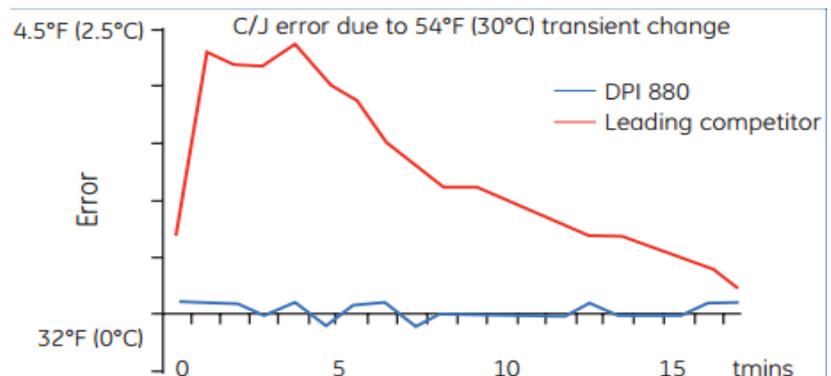
### DPI 880 Multi-function Calibrator

The DPI 880 Multi-function Calibrator is an ultra compact and simple to use tool for testing, configuring and calibrating virtually all process parameters. It measures, sources and simulates mA, mV, V, RTDs, thermocouples, ohms, frequency, pulses and pressures, captures switch values and provides 24 V loop power.

- Single tool replaces several test instruments
- Electrical, Temperature, Pressure and frequency
- 32 IDOS® ‘Plug-N-Play’ Pressure modules from 10 in H2O to 10,000 psi (25 mbar to 700 bar)
- Sources and reads mA, mV, ohms, frequency and pulses
- Simulates and reads 8 RTDs and 12 thermocouples
- Automatic switch test and pressure leak test
- 24 V loop power supply
- Optional Data logging
- Compact, simple to use, easy to carry



	Measure or source							IDOS Pressure
	mA	V	mV	Hz	RTD	TC	V	
mA	✓	✓	✓	✓	✓	✓	✓	✓
mA (24V)	✓	✓	✓	✓	✓	✓	✓	✓
V	✓	✓	✓	✓	✓	✓	✓	✓
Switch test	✓	✓	✓	✓	✓	✓	✓	✓
IDOS Pressure	✓	✓	✓	✓	✓	✓	✓	
Leak test								✓



## 02. Portable<UPS Series>

### UPS-II Smart Loop Calibrator for Millia

- Sources and reads milliamps
- Accuracy 0.05% of range
- Auto-ramp cycling for endurance tests
- Auto-stepping for hands-free calibration
- Fixed currents for calibration and valve stroking



### The UPS-III-IS Loop Calibrator

- Measure or Source 0 to 24 mA
- Accuracy 0.01% of reading
- Dual mA and % readout, linear or flow
- Step, Span Check, Valve Check, Ramp
- 60 VDC measurement and continuity
- HART® compatible



### The UPS-III-IS Loop Calibrator

- ATEX/IEC intrinsically safe
- Measure or source 0 to 24 mA
- Accuracy 0.015% of reading
- Dual mA and % readout, linear or flow
- Step, span check, valve check, ramp
- 50 VDC measurement and continuity
- HART® resistor built in
- Uses industry standard AA batteries
- Leather case with carry strap



## 02. Portables <DPI 705 Series Handheld Pressure Indicator>

Easy to use rugged hand held portable pressure indicators, designed to offer accurate and reliable pressure measurement. Compact, robust and lightweight, it is designed for single-handed operation and provides many essential features required for routine maintenance and system troubleshooting. Intrinsically safe (I.S.) versions are available certified to European and American standards for use in hazardous areas, along with Differential, Gauge & Absolute pressure measurement versions.

- Ranges 0 to 70 mbar through to 700 bar (0 to 1 psi through to 10,000 psi)
- 16 pressure units
- Rugged, lightweight handheld design
- Leak test, tare, max/min and filter
- Intrinsically safe version
- Optional pneumatic and hydraulic hand pump



Pressure Range	Internal Sensor DPI 705	Remote Sensor DPI 705 R
70 or 200 mbar (1 or 3 psi)	d	
350 mbar (5 psi)		g, a, d
1 bar (15 psi)	d	g, a, d
2 bar (30 psi)	g, a	g, a, d
3.5 bar (50 psi)		g, a, d
7 bar (100 psi)	g	g, a, d
10 bar (150 psi)		g, a, d
20 bar (300 psi)	g	g, a, d
35 bar (500 psi)		g, a, d
70 bar (1000 psi)		g, a
135, 200, 350 or 700 bar (2000, 3000, 5000 or 10,000 psi)		a



## 02. Portables <DPI 104 Digital Test Gauge>

- Ranges from 700 mbar to 1400 bar (10 psi to 20,000 psi)
- 0.05% FS Accuracy, Temperature compensated from -10 to 50° C
- 11 selectable pressure units
- Large, easy to read display with five digit resolution
- Stainless & Inconel wetted parts for aggressive media
- Pressure switch test, Min/max, tare and alarm functions
- Pump Kits available
- Complete with rubber boot to ensure total protection of your tool



### Pressure Ranges

Range			Resolution		Maximum Working Pressure	
psi	bar	type	psi	mbar	psi	bar
0-10**	0-0.7	G*	0.001	0.01	11.2	0.77
0-30	0-2	G* or A	0.001	0.1	32	2.2
0-100	0-7	G* or A	0.01	0.1	111.7	7.7
0-300	0-20	G* or A	0.01	1	319	22
0-1000	0-70	G* or A	0.1	1	1117	77
0-3000	0-200	SG	0.1	10	3190	220
0-5000	0-350	SG	0.1	10	5583	385
0-10,000	0-700	SG	1	10	11,165	770
0-15,000	0-1000	SG	1	100	15,950	1100
0-20,000	0-1400	SG	1	100	22,330	1540

## 02. Portables < Dry Block Temperature Calibrator Series >

### Dry TC 165 and Dry TC 650

These dry block calibrators incorporate the latest metal block and electronic control technology and offer a choice of precision bored well inserts to accommodate a wide range of test devices.

- Dry TC 165 temperature range -35° C to 165° C (-31 °F to 329 °F)
- Dry TC 650 temperature range ambient to 165° C (329 °F)
- Accuracy from 0.2° C
- Stability 0.05° C
- Rapid heating and cooling
- Light weight and robust for field use
- Choice of interchangeable well inserts
- Easy to set-up and use



### Liquid TC 165 and Liquid TC 255

These multi-purpose calibrators combine the portability of dry block calibrators with the flexibility of liquid immersion baths to enable the testing and calibration of virtually any shape and size of devices. The calibrators can be re-configured by the user to function as a liquid bath, as an infra-red black body source and as a dry block calibrator with interchangeable inserts.

- Liquid TC 165 temperature range -35° C to 165° C (-31 °F to 329 °F)
- Liquid TC 255 temperature range ambient to 255° C (491 °F)
- Accuracy from 0.1° C
- Stability 0.05° C
- Large bath for irregular and multiple devices
- Multi-purpose – liquid bath, black body source, dry block
- Interchangeable bath – simplifies fluid changes
- Light weight and robust for field use
- Leak-proof bath cover for transportation

## 03. Controllers/Indicators

Our economical solution to pressure indication & control for production, test and calibration, PACE is a flexible modular family of high speed pressure controllers and precision pressure indicator.

### Applications:

- Manufacturing
- Instrument workshops
- Services companies
- Laboratories
- Automotive test cells
- Burst testing
- Aerospace

### Common Features:

- High resolution color touch display
- Easy to use icon driven task menu
- Three levels of measurement precision
- Compatibility with software
- RS232, IEEE, USB & Ethernet connectivity as standard
- Negative calibration included as standard
- Twenty four scale units plus four user defined
- Utilizes GE's unique resonant & piezo-resistive sensor technology
- Multi language



### 03. Controllers/Indicators<Pace5000/6000 Modular Pressure Controller>

A new generation of high precision Druck pressure controllers, designed for test bench, bench top and rack mount calibration and automated test applications.



#### PACE5000 Chassis

- Single channel pressure controller chassis
- Easy to use color touch screen display
- Can be used with any interchangeable PACE CM control module as a bench top or rack mounted pressure controller
- Intuitive task driven menu with basic, preset & divide as standard
- Multi Language - any additional language to suit specific requirements can easily be translated & downloaded
- RS232, IEEE connectivity, Ethernet and USB as standard
- Compatible with software packages

#### PACE6000 Chassis

Additional (to PACE5000) features:

- Dual channel pressure controller chassis
- With two PACE CM control modules fitted the PACE6000 can be used in single, auto-ranging or simultaneous dual pressure control mode
- No module pressure range ratio limit
- Aeronautical Option

#### PACE CM-High Speed Pressure Control Module

- Interchangeable robust control module that is easily installed into a PACE chassis
- Calibration data stored in the control module (only the CM needs to be sent away for re-calibration)
- High speed pressure control
- Full scale pressure ranges from 25 mbar up to 210 bar (0.35 up to 3000 psi/2.5 KPa up to 21 MPa)
- Choice of standard, high or premium pressure measurement precision
- Barometric reference available to enable pseudo gauge/ absolute indication & control
- Aeronautical version

### 03. CONTROLLER/INDICATORS: <PACE1000/1001 Precision Pressure Indicator>

A high precision Druck pressure indicator, designed for test bench, bench top and panel mount calibration, test and monitoring, applications



#### PACE1000 Precision Pressure Indicator

- Single or multiple internal pressure range configurations
- Additional external Universal Pressure Modules available
- Up to three pressures displayed simultaneously
- Up to five pressures digitally re-transmitted
- Full scale pressure ranges from 25 mbar up to 1,000 bar (0.35 up to 14500 psi/2.5 KPa up to 100 MPa)
- Choice of precision up to 0.005% FS
- Long term stability up to 0.01% Rdg per anual
- Data Logging as standard with on screen replay
- Selectable numeric or graphical display
- Min/Max/Average display
- Compatible with software packages
- Multi Language – any language to suit specific requirements can easily be translated & downloaded

#### PACE1001 Precision Barometric Indicator and Recorder

- Pressure range 750-1150 mbar (10.9-16.7 psi) (absolute)
- Additional external Universal Pressure Modules available
- Up to three pressures displayed simultaneously and digitally re-transmitted
- Choice of precision up to 0.025 mbar/0.0003625 psi
- Data Logging as standard with on screen replay
- Selectable numeric or graphical display
- Min/Max/Average display
- Compatible with software packages
- Airfield Task as standard: Display QFE, QFF or QNH in pressure units or as altitude in feet or meters

## 04. Hand Pumps

Hand pumps are an essential part of any pressure test or calibration system. These high quality, high performance hand pumps are designed for ease of use and reliability.

Models are available to suit the widest range of applications from very low to high pneumatic pressures and for very high pressure hydraulic systems. A choice of adaptors and hoses simplify device connections, reduce leakage and improve safety and for convenience there are flexible carrying systems.

### Applications:

- Generate vacuum, pneumatic and hydraulic pressures
- Rugged hand held pumps for field use
- Use with pressure indicators and gauges
- Testing, commissioning, fault finding, calibration
- Generate pressure from -950 mbar (28.5 inHg) to 1000 bar (15,000 psi)



## 04. Hand Pumps <PV210/PV211/PV212/PV411A>



### PV210 Low Pressure Pneumatic Hand Pump

- Dual source of pneumatic pressure and vacuum
- Generate vacuum to 90%
- Generate pressure to 3000 mbar (45 psi)
- Thermally insulated to eliminate temperature effects
- Use with DPI104 Gauge and Remote Pressure sensors



### PV211 Pneumatic Pressure and Vacuum Pump

- Dual source of pneumatic pressure and vacuum
- Pneumatic pressure in excess 40 bar (600 psi)
- Generates vacuum to -950 mbar (-28.5 inHg)
- Adjustable stroke
- Built-in fine adjust vernier
- Needle valve for controlled pressure release
- High pressure generation with minimal effort
- Use with DPI104 Gauge and Remote Pressure sensors



### PV 212 Hydraulic Hand Pump

- Compatible with distilled water, or mineral oil
- Pressures up to 1000 bar (15,000 psi)
- Large transparent 100cc capacity reservoir
- Quick priming and pressure generation using scissor action pump
- Controlled pressure release and adjustment
- High pressure / priming selector
- Can be filled even under pressure
- HK15 High Pressure hose kit available
- Use with DPI104 Gauge and Remote Pressure sensors



### PV411A Multi-Function Four-in-one Hand Pump

- Pneumatic pressures to 40 bar (600 psi)
- Hydraulic pressures to 700 bar (10,000 psi)
- Generates vacuum to -950 mbar (-28.5 inHg)
- Vacuum priming for hydraulic systems
- Excellent low pressure control
- Adjustable overpressure protection (can be set from 300 to 10,000 psi)
- Use with DPI104 Gauge and Remote Pressure sensors

## 05. Air Data Test System <ADTS 405/ADTS550F>

### ADTS 405 Druck Air Data Test System

#### Features

- High accuracy, RVSM compliant
- Fightline and rack mount versions
- Civil and military specifications
- Integral or remote pressure/vacuum supplies
- Fully programmable for aircraft type
- Protection for aircraft instruments



### ADTS550F, Wireless ADTS500 Series Easy-to Use Pitot Static Tester



#### Features

- ADTS Touch hand terminal with WiFi and Bluetooth® wireless technology (backup cable supplied)
- Swipe-action, touch screen user interface with color graphics and menu
- Standard icons and layouts for routine testing
- Multiple languages
- High flow proportional pressure control technology
- Large capacity pressure/vacuum pump
- TERPS high accuracy pressure sensors inside
- Accuracy suitable for RVSM validation
- 15-month accuracy
- 18-month accuracy option
- Engine Pressure Ratio (EPR) option
- Low Airspeed option
- Stores customized aircraft test sequences
- Accessories bag supplied, ADTS Touch carry case option
- Available in a 2 channel, 3 channel or 4 channel configuration
- A 2nd ADTS Touch hand terminal can be used as an indicator
- Retrospectively upgradable (ADTS552F upgradable to a three-channel or a 4-channel and ADTS553F upgradable to a 4-channel)
- GE ADTS global service support

# 06. GE RVI - Remote Visual Inspection

## XL Lv VideoProbe

### Feature

- Digital zoom is 5x
- 1 GB internal flash memory
- 1 USB® 2.0 port, VGA video out
- Full-tip optic interchangeability with secure double threads
- Two or four hour Lithium Ion Battery
- Servo motor All-Way\* Probe articulation
- Probe operates up to 100°C
- Ingress protection to IP55



## XL Vu Versatile Video Borescope

### Feature

- Digital zoom is 5x
- 4 GB internal flash memory
- 2 USB® 2.0 port, VGA video out
- Full-tip optic interchangeability with secure double threads
- Two or four hour Lithium Ion Battery
- Servo motor All-Way\* Probe articulation
- Probe operates up to 100°C
- Ingress protection to IP55



## Mentor Visual iQ™ VideoProbe™

### Feature

- Digital zoom is 5x
- 16 GB internal flash memory
- 2 USB® 3.0 port, one USB 3.0 client micro ‘B’ port
- Two or four hour Lithium Ion Battery
- Measurement: stereo, 3D stereo, 3D phase
- Servo motor All-Way\* Probe articulation
- Probe operates up to 100°C
- Ingress protection to IP65
- Dual-Band Wifi and Bluetooth 4.0 enable



# 06. GE RVI -Application

## Aerospace



### Applications & Customers

- Turbine Engines
- Blade defect detection and measurement
- Foreign Object Debris (FOD) removal
- Commercial Operators
- Military – Foreign and Domestic
- Engine OEMs



## Energy



### Applications & Customers

- Stationary Gas and Steam turbines
- Heat exchangers
- Gear boxes
- Defect detection and measurement
- Foreign Object Debris (FOD) removal
- Fossil Fuel
- Nuclear Plants
- Renewable (Wind, Hydro)
- Equipment OEMs



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## Oil & Gas



### Applications & Customers

- Gas Compression Equipment
- Piping
- Heat exchangers
- Defect detection and measurement
- Foreign Object Debris (FOD) removal
- Oil Producers and Refiners
- Transmission
- Equipment OEMs



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## Nuclear Inspection

- Small space inspection
- Difficult access
- Long probe length
- Radiation hardening

