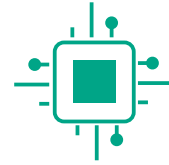


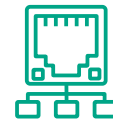
# DUAL/TRIPLE DP INDICATOR

WITH ETHERNET PORT / MODBUS TCP

# DPG211 ETH



2 or 3 x Integral  
Differential Pressure Sensors



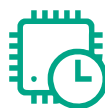
Ethernet Port / MODBUS TCP



Datalogging upto 5 years



AHU Digital Input



Real Time Clock



IP65 Front

# DUAL/TRIPLE DP INDICATOR

WITH ETHERNET PORT / MODBUS TCP

# DPG211 ETH

## ABOUT DPG211 ETH

DPG211 ETH is a state-of-the-art Clean Room Monitor with a datalogging option. It has 3 differential pressure sensors which allow the measurements to be made at three independent sets of locations (reference and measure).

It uses a 32-bit microprocessor to incorporate a host of useful features. For one, it has a large memory that allows the measurements records to be saved in csv file format for 30 previous days - about 45000 records with 1 record per minute.

Optionally, it can be supplied with a memory for records up to 5 years - about 550000 records. Each record has a date and time stamp from the high-accuracy RTC working in standalone or synchronised (with master) mode.

The instantaneous (live) data is accessed using MODBUS TCP, which allows the master to read upto 254 instruments in one second or less.

The logged data is in CSV (comma-separated values) format which can be downloaded by the master using FTP (File Transfer Protocol) which also allows a month's data to be downloaded in a couple of seconds by a SCADA or other master.

Both MODBUS TCP and FTP are open standard protocols. This means that the instrument can be used by any system integrator with any SCADA, PLC, DDC or DCS, HMI. No special software is required from Radix.

This means that the customer is not locked in to any given instrument vendor, both at the time of purchase as well as for future expansions.

Further, DPG211 ETH can also be supplied with a multi-master option, which allows the live as well as logged data to be simultaneously accessed by multiple masters, eg DDC, SCADA or DCS.

All these features make DPG211 ETH easily the most powerful datalogging Clean Room Monitor available.

# DUAL/TRIPLE DP INDICATOR

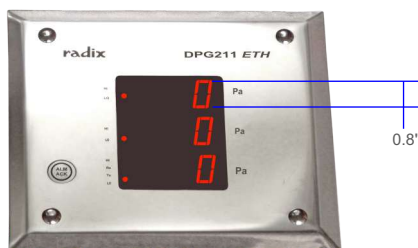
WITH ETHERNET PORT / MODBUS TCP

# DPG211 ETH

## DIFFERENT DISPLAY OPTIONS



4 rows (3 PV with RTC)



3 rows (3 PV)

## DATALOGGING FACILITY



## COMPACT DESIGN / LOW DEPTH



## 3 x INTEGRAL DP INPUTS



## SUPPLY - POWER OVER ETHERNET (PoE)



# DUAL/TRIPLE DP INDICATOR

WITH ETHERNET PORT / MODBUS TCP

# DPG211 ETH

## SPECIFICATIONS

All specifications at ambient of 25 °C, unless specified otherwise

INPUTS	
No. of inputs	2, 3
Input type	Integral Radix DP sensor
AHU status input	Digital input, potential free
Range	-199 ~ 900 Pa, -19.9 ~ 90.0 mmWC (user selectable)
Default range / unit at the time of supply	-199 to +199 Pa
Accuracy	± 1.5% of reading ± 2 Pa, ± 1.5% of reading ± 0.2 mmWC
Sensor zero function	To cancel zero drift, single key with password protection
RTC accuracy	
Stand alone mode	± 1 second/day
Slave with SCADA as master	Same as server RTC ± 1 second
INDICATION	
2-row	
DP1	Window 1, 3 digit, 7 segment, 0.8" (20.3 mm) red LED display
DP2	Window 2, 3 digit, 7 segment, 0.8" (20.3 mm) red LED display
Status indication	LEDs for visual alarms, RS485 signals
3-row	
DP1	Window 1, 3 digit, 7 segment, 0.8" (20.3 mm) red LED display
DP2	Window 2, 3 digit, 7 segment, 0.8" (20.3 mm) red LED display
DP3	Window 3, 3 digit, 7 segment, 0.8" (20.3 mm) red LED display
Status indication	LEDs for visual alarms, RS485 signals, Unit indication of Pa or mmWC
4-row	
DP1	Window 1, 3 digit, 7 segment, 0.56" (14.2 mm) red LED display
DP2	Window 2, 3 digit, 7 segment, 0.56" (14.2 mm) red LED display
DP3	Window 3, 3 digit, 7 segment, 0.56" (14.2 mm) red LED display
Real time clock	Window 4, 4 digit, 7 segment, 0.56" (14.2 mm) red LED display
Status indication	LEDs for visual alarms, RS485 signals, AM, PM LED
OUTPUTS	
Buzzer	Audio
No. of visual alarms	HI and LO for each DP

# DUAL/TRIPLE DP INDICATOR

WITH ETHERNET PORT / MODBUS TCP

# DPG211 ETH

## SPECIFICATIONS

All specifications at ambient of 25 °C, unless specified otherwise

COMMUNICATION	
System CPU	32 bit processor
Communication interface	Ethernet
Ethernet speed	10 / 100 Mbps
Ethernet protocol	MODBUS TCP, FTP, HTTP, UDP
Slave ID	Default 1
Data type	Integer x 10
Parameters	
Process Variables	Read only
Setpoints	Read & write from the host computer
Alarm Status	Read only
Hysteresis	Read & write from the host computer
Alarm Activation Delay	Read & write from the host computer
Power On Activation Delay	Read & write from the host computer
Input Bias	Read & write from the host computer
Input Skip	Read & write from the host computer
RTC Synchronization	Read & write from the host computer
DATALOGGING	
No. of records	5,25,600 per year with 1 min storage interval & can store up to 5 years' data
Default data logging period	30 days (approx. 45000 records)
Data logging interval	1 min to 1440 minutes (User Programmable through browser page)
Data retrieval	Over Ethernet using FTP protocol
Data retrieval time	< 5 seconds
Data organisation	Records stored day-wise (1 file per day)
Data Format	CSV (comma-separated values)
PROGRAMMABLE PARAMETERS	
Setpoint	-19.9 ~ 90.0 mmWC -199 ~ 900 Pa
Resolution	0.1 for DP unit mmWC 1 for DP unit Pa
Digital filter	A (minimum) ~ F (maximum)
Hysteresis	User selectable
Alarm logic (Fig1)	a. Full scale high b. Full scale low
Alarm type	Self reset
Setpoint lock	ON, OFF

# DUAL/TRIPLE DP INDICATOR

WITH ETHERNET PORT / MODBUS TCP

# DPG211 ETH

## SPECIFICATIONS

All specifications at ambient of 25 °C, unless specified otherwise

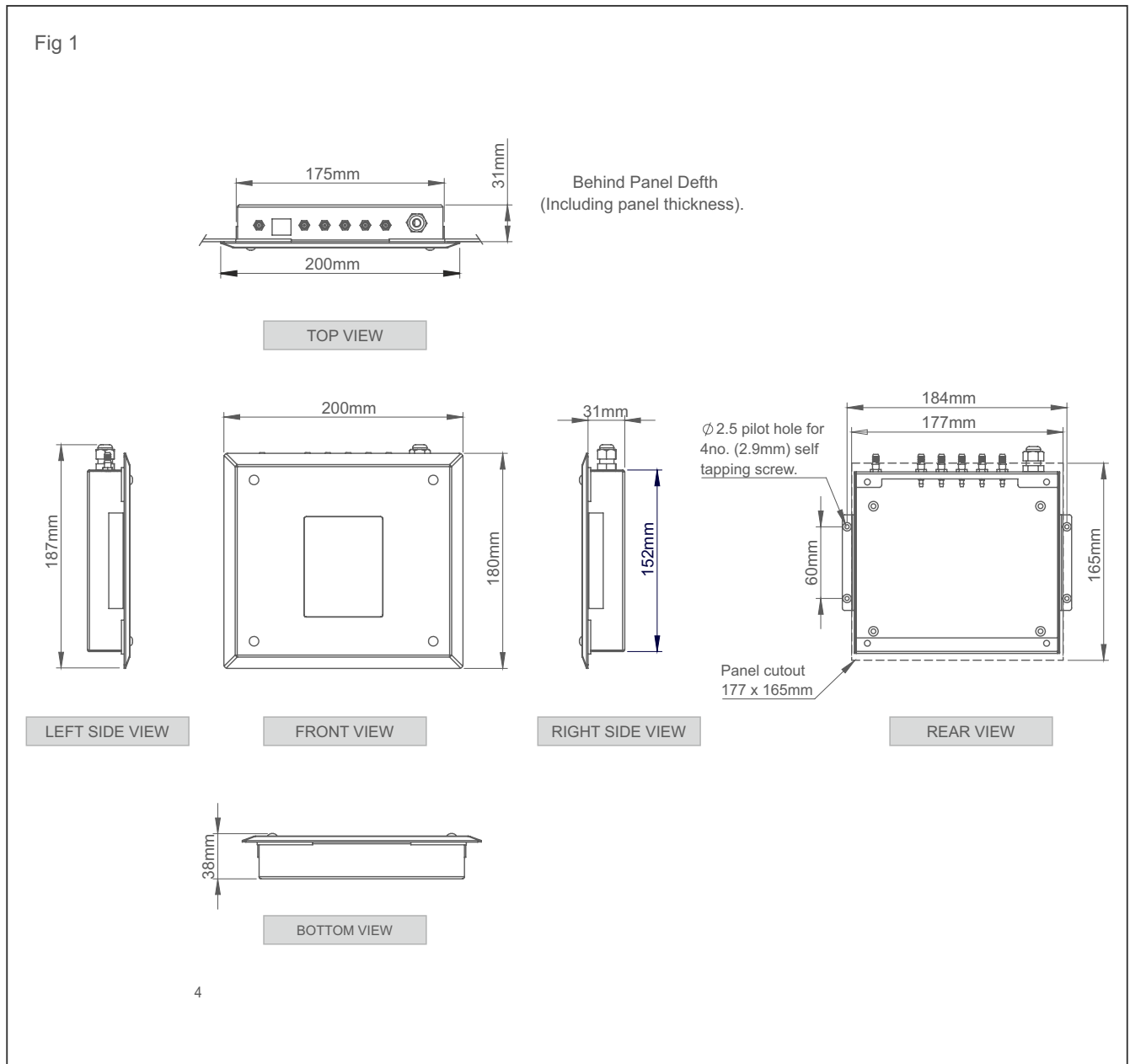
MECHANICAL	
MOC	
Faceplate	SS304
Body	MS, powder coated
Dimensions (in mm)	200(W) x 180(H) x 30(D)
Mounting	
Modular panel	a) 50 mm or more b) 100 mm or more
Brick wall	Using accessories : grouting box and SS304 interface plate (both to be ordered separately)
Cutout (in mm)	177(W) x 165(H)
OTHER	
Programming	Through 4 tactile keys
Supply voltage	a) 17~30V DC b) 17~30V AC c) PoE
Power consumption	4 watts maximum
Operating ambient temperature	0~50 °C
Relative humidity	Below 90%, non condensing

# DUAL/TRIPLE DP INDICATOR

WITH ETHERNET PORT / MODBUS TCP

# DPG211 ETH

## DIMENSIONS mm



# DUAL/TRIPLE DP INDICATOR

WITH ETHERNET PORT / MODBUS TCP

# DPG211 ETH

## FEATURES SUMMARY

- 2, 3 or 4-row, large, bright red LED display
- IP65 front
- 2 programmable alarms with audio-visual annunciation
- MODBUS TCP & multidrop communication for PLC, SCADA, etc
- Upto 5 years' data can be stored
- Data is in CSV format and easy to understand
- Guaranteed back-up against Ethernet / SCADA / computer failures
- FTP open standard protocol - instrument can be used by any third party system integrator with any SCADA or PLC or HMI
- MODBUS TCP to get data using MODBUS TCP client on SCADA / PLC / HMI
- Firmware can be updated over Ethernet
- Adjustable data storage interval via browser web page (1-1440) min
- 4 x MODBUS TCP clients supported at a given time
- 3 x FTP client supported at a given time with 180 seconds internal FTP connection timeout

## ORDERING INFORMATION

CODE	SPECIFICATION	1	2	3	4	5
<b>2936</b>						
1	<b>No. of integral DP inputs</b>					
	Dual input	A				
	Triple input	B				
2	<b>Supply voltage</b>					
	17~30V DC		1			
	17~30V AC		2			
	PoE		3			
3	<b>Data logging</b>					
	Without data logging			A		
	With data logging (30 days)			B		
	With data logging (duration >30 days - please specify)			C		
4	<b>Buzzer</b>					
	None				1	
	Potential free input				2	
	Input with external supply				3	
	Output without AHU				4	
	Output with AHU				5	
5	<b>ALM ACK</b>					
	None					A
	No touch					B
	Alarm acknowledge key					C

**Order Code Format :** 2936-X-X-X-X-X

Example

DPG211, 3 x Integral DP sensor, Unit : Pa, Ethernet, Supply : PoE, With data logging memory : 30 days, Buzzer, Alarm Ack  
2936-B-3-B-4-C

ENQUIRIES

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