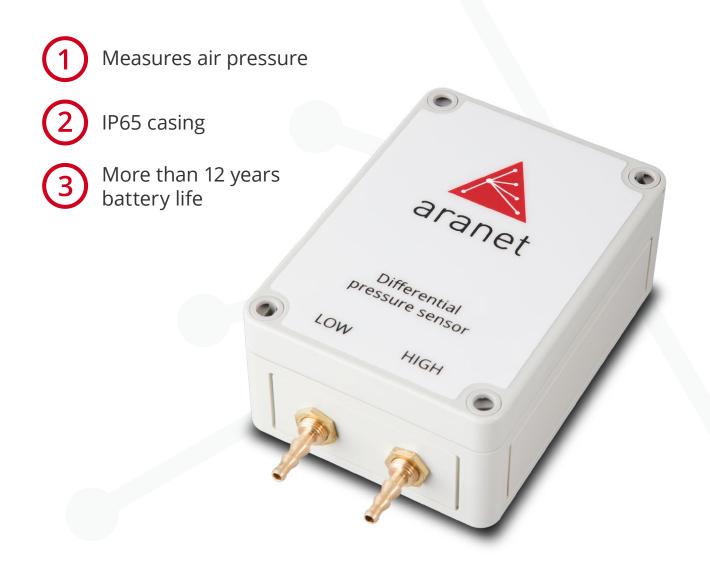
## Aranet Differential Pressure sensor

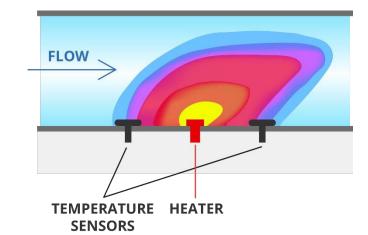




Used in HVAC, building automation, clean rooms, pharmaceutical industry and laboratories. Applications include clogged air filter detection, stairwell pressurization, measuring the airflow and pressure through a system.

TDSPDPU1 (NA) TDSPDPR1 (RU)

Sensor performance	
Pressure range	± 500 Pa
Resolution	0.02 Pa
Accuracy <sup>1</sup>	0.10 Pa + 3 % of reading
Long term drift	0.05 Pa / year
Response time (99 %)	< 1 second
Temperature	-20 °C to +60 °C
compensation range	(-4 °F to 140 °F)
Calibrated for	Air, N <sub>2</sub>
Gas compatibility <sup>2</sup>	Air, $N_2$ , $O_2$



Radio parameters	
Line of sight range	3 km (1.9 mi)
Supported ISM bands	EU868, NA915
Transmitter power	14 dBm
Data transmission interval <sup>3</sup>	1, 2, 5 or 10 minutes
Data protection	XXTEA encryption
Compatible base stations	Aranet PRO

General	
Ingress Protection code	IP65
Maximum operating	-40 °C to 60 °C
temperature range	(-40 °F to 140 °F)
Dimensions	154 x 94 x 43 mm
	(6.1 x 3.7 x 1.7 in)
Weight <sup>4</sup>	250 g (9 oz)
Enclosure material	PS plastic
Included in the box	2 AA Alkaline batteries

Pov	ver	1 AA battery	
Тур	e	Alkaline <sup>5</sup>	Lithium <sup>6</sup>
Оре	erating	-20 °C to 55 °C	-40 °C to 60 °C
tem	perature	(-4 °F to 131 °F)	(-40 °F to 140 °F)
TX i	nterval	Battery lifetime at 20 °C (68 °F) <sup>7</sup>	
1	minute	3.9 years	5.4 years
2	minutes	6.8 years	9.8 years
5	minutes	10 years	10+ years
10	minutes	10 years	10+ years

Compliance		
CE	Conformité Européenne	
IC	Innovation, Science and Economic Development Canada	
FCC	Federal Communications Commission (USA)	

<sup>&</sup>lt;sup>1</sup> Accuracy is provided at temperature +25 °C and absolute pressure 966 mbar.

 $<sup>^{2}</sup>$  Long term exposure to (high concentrations of)  $O_{2}$  at high temperatures can reduce the product lifetime.

<sup>&</sup>lt;sup>3</sup> Due to regulatory requirements 1 minute data transmission interval is not available in Russia.

<sup>&</sup>lt;sup>4</sup> Weight with alkaline AA Fujitsu LR6G07 Premium battery.

<sup>&</sup>lt;sup>5</sup> AA Fujitsu LR6G07 Premium battery used for tests and calculations.

 $<sup>^{\</sup>rm 6}$  AA Energizer L91 Ultimate Lithium battery used for tests and calculations.

<sup>&</sup>lt;sup>7</sup> Battery lifetime data has been obtained by mathematical extrapolation and is provided for descriptive purposes only and is not intended to make or imply any guarantee or warranty.