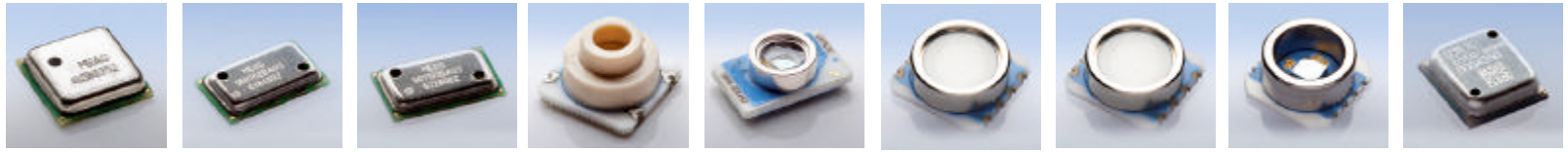
COMPARISON OF PRESSURE SENSOR MODULES FOR BAROMETRIC APPLICATIONS



Product	MS5637	MS5607	MS5611	MS5805	MS5806	MS5803-01	MS5540	MS5534	MS5561
Pressure Range	10-2000mbar	10-1200mbar	10-1200mbar	10-2000mbar	10-2000mbar	10-1300mbar	10-1100mbar	10-1100mbar	10-1100mbar
Supply Voltage	1.8-3.6V	1.8-3.6V	1.8-3.6V	1.8-3.6V	1.8-3.6V	1.8-3.6V	2.2-3.6V	2.2-3.6V	2.2-3.6V
Temperature Range	-40..+85°C	-40..+85°C	-40..+85°C	-40..+85°C	-40..+85°C	-40..+85°C	-40..+85°C	-40..+125°C	-40..+85°C
Conversion Time	0.54ms	0.54ms	0.54ms	0.54ms	0.54ms	0.54ms	max. 35ms	max. 35ms	max. 35ms
Supply Current/ Conversion	1.25mA	1.4mA	1.4mA	1.25mA	1.4mA	1.4mA	1mA	1mA	1mA
Supply Current/ Standby	0.01µA	0.02µA	0.02µA	0.01µA	0.02µA	0.02µA	0.1µA	0.1µA	0.1µA
Resolution ADC	24bit	24bit	24bit	24bit	24bit	24bit	16bit	16bit	16bit
Digital Interface	I2C	SPI + I2C	SPI + I2C	I2C	SPI + I2C	SPI + I2C	Pseudo-SPI	Pseudo-SPI	Pseudo-SPI
Pressure Resolution	0.016mbar	0.024mbar	0.012mbar	0.02mbar	0.024mbar	0.012mbar	0.1mbar	0.1mbar	0.1mbar
Temperature Resolution	0.002°C	0.002°C	0.002°C	0.002°C	0.002°C	0.002°C	0.01°C	0.01°C	0.01°C
Max. Pressure Error@ RT	±2.0mbar	±1.5mbar	±1.5mbar	±2.0mbar	±1.5mbar	±1.5mbar	±1.5mbar	±1.5mbar	±1.5mbar
Max. Temp. Error @ RT	±1.0°C	±0.8°C	±0.8°C	±1.0°C	±0.8°C	±0.8°C	±0.8°C	±0.8°C	±0.8°C
Dimensions (mm)	3.0 x 3.0 x 0.9	5.0 x 3.0 x1.0	5.0 x 3.0 x1.0	4.5 x 4.5 x 3.5	6.4 x 4.0 x 2.8	6.2 x 6.4 x 2.9	6.2 x 6.4 x 2.9	9.0 x 9.0 x 4.3	4.3 x 4.8 x 1.7
Over pressure	6bar	6bar	6bar	5bar	10bar	10bar	10bar	10bar	5bar
Package	PCB substrate with metal cap	PCB substrate with metal cap	PCB substrate with metal cap	Ceramic substrate with plastic cap	Ceramic substrate with metal ring	Ceramic substrate with metal ring	Ceramic substrate with metal ring	Ceramic substrate with metal ring	PCB substrate with metal cap
Gel protection	no	no	no	yes	yes	yes	yes	yes	no
Media Compability	Dry air	Dry air	Dry air	Waterproof	Waterproof	Waterproof	Waterproof	Waterproof	Dry air