Sensor	SHT10	SHT11 SHT71	SHT15 SHT75	SHT20	SHT21	SHT25	STS21	SHT30 SHT30A	SHT31 SHT31A	SHT35 SHT85 SHT35A	STS30 STS30A	STS31 STS31A	STS35	SHTW1	SHTW2	SHTC1	SHTC3
Status	**EOL**			**Not Recommended for New Designs**				**Recommended for New Designs**						**EOL**	**Recommended for New Designs**		
Typ. RH Accuracy (%RH)	±4.5% @20-80% RH	±3% @20-80% RH	±2% @10-90% RH ±1.8% @10-90% RH	±3% @20-80% RH	±2% @20-80% RH	±1.8% @10-90% RH		**SHT30:** ±2% @10-90% RH **SHT30A:** ±3% @10-90% RH	±2% @0-100% RH	±1.5% @0-80% RH				±3% @20-80% RH	±3% @20-80% RH	±3% @20-80% RH	±2% @20-80% RH
RH meas. range (%)	0 to 100			0 to 100				0 to 100						0 to 100			
Typ. T Accuracy (°C)	±0.5% @25°C	±0.4% @25°C	±0.3% @10-40°C	±0.3% @5-60°C	±0.3% @5-60°C	±0.2% @5-60°C	±0.2% @5-60°C	**SHT30:** ±0.2% @0-65°C **SHT30A:** ±0.3% @0-65°C	**SHT31:** ±0.2% @0-90°C **SHT31A:** ±0.3% @-40-90°C	**SHT35:** ±0.1% @20-60°C **SHT85:** ±0.1% @20-50°C **SHT35A:** ±0.2% @-40-90°C	**STS30:** ±0.2% @0-65°C **STS30A:** ±0.3% @0-65°C	**STS31:** ±0.2% @0-90°C **STS31A:** ±0.3% @-40-90°C	±0.1% @20-60°C	±0.4% @5-60°C	±0.3% @5-60°C	±0.3% @5-60°C	±0.2% @5-60°C
T meas. range (°C)	-40 to 123.8°C			-40 to 125°C			-40 to 125°C	-40 to 125°C			-40 to 125°C			-30 to 100°C	-30 to 100°C	-30 to 100°C	-40 to 125°C
Interface	S-bus			I2C, 400kHz			I2C, 400kHz	I2C, 1MHz			I2C, 1MHz			I2C, 400kHz	I2C, 400kHz	I2C, 400kHz	I2C, 1MHz
I2C Address	-			0x40			0x48	0x44 ADDR=L, 0x45 ADDR=H, SHT85: 0x44			0x4A ADD=L, 0x4B ADDR=H			0x70	0x70	0x70	0x70
CRC checksum for measured values	CRC8			CRC8			CRC8	CRC8			CRC8			CRC8	CRC8	CRC8	CRC8
Method to determine measured data availability	Sensor pulls DATA line low after completion of measurement			Sensor pulls down the SCL line while measuring Polling				Clock stretching Polling									
Measurement mode	Single shot			Single shot			Single shot	Single shot, periodic (0.5, 1, 2, 4, 10 meas./s)			Single shot, periodic (0.5, 1, 2, 4, 10 meas./s)			Single shot	Single shot	Single shot	Single shot
VDD Range (V)	2.4 to 5.5V			2.1 to 3.6V			2.1 to 3.6	2.15 to 5.5			2.15 to 5.5			1.62 to 1.98	1.62 to 1.98	1.62 to 1.98	1.62 to 3.6
Typ. Current consumption: measurement mode (uA)	550			300			300	600			600			385	385	385	430 low power mode: 270
Typ. Current consumption: idle mode (uA)	0.3			0.15			0.15	0.2			0.2			0.7	0.7	0.7	0.3
Typ. Meas. Duration: T (ms)	80 @12bit			66 @14bit			66 @14bit										
Typ. Meas. Duration: RH (ms	80 @12bit			22 @12bit													
Typ. Meas. Duration: RH + T (ms)								12.5, high resolution			12.5, high resolution			10.8	10.8	10.8	10.8 low power mode: 0.7
Avg. current consumption: 1 RH and T meas./s single shot mode (uA)	90			27			20	8			8			4.8	4.8	4.8	4.9 low power mode: 0.5
Protection	SF1 filter cap			SF2 filter cap				SF2 filter cap Integrated filter (F option) Protective tape (P option)									
Resolution	Selectable RH: 8, 12bit, T: 12, 14bit			Selectable RH: 8, 10, 12, 12bit, T: 11 to 14bit				Selectable resolution for RH, T: high, medium, low			Selectable resolution for RH, T: high, medium, low						
Integrated heater for functionality check	Y			Y				Y			Y						
Other Features								Reset pin Alert pin, RH and T programmable limits ART (accelerated response time)			Reset pin Alert pin, RH and T programmable limits ART (accelerated response time)						
Package	SHT1x: SMD, 7.5x4.9x2.6 mm SHT7x: TH 19.5x5.08x3.1mm			DFN6 3x3x1.1mm			DFN4 2x2x0.75mm	DFN8 2.53x2.5x0.9mm			DFN8 2.53x2.5x0.9mm			WLCSP8 1.3x0.7x0.5mm	WLCSP4 1.3x0.7x0.5mm	DFN4 2x2x0.75mm	DFN4 2x2x0.75mm