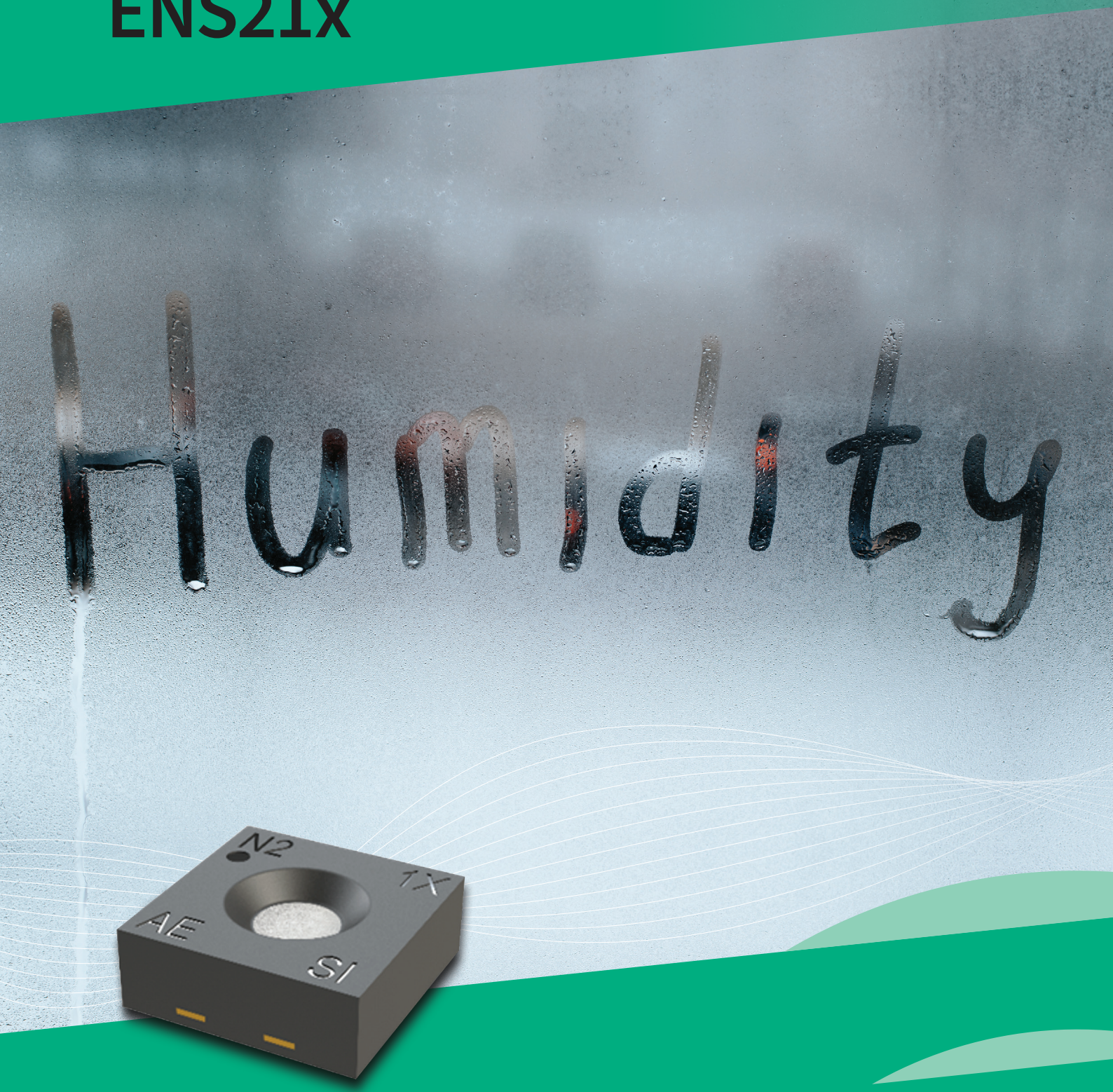
ENS21x



Scalable Family of High-Performance Digital Temperature and Humidity Sensors

- Industry leading accuracies
- Lowest power consumption
- Fastest response times

ScioSense®

ENS21x

Scalable Family of High-Performance Digital Temperature and Humidity Sensors

The ENS21x is a family of high-performance temperature and relative humidity sensors with accuracies tailored to the needs of specific applications. From high volume consumer to automotive grade or highest accuracy demands in instrumentation, there is virtually no application the ENS21x family cannot address.

Encapsulated in a tiny QFN4 package, the devices include an I²C interface to communicate with an external host processor. Moreover, the ENS21x family provides digital, pre-calibrated outputs (Kelvin and % relative humidity) and works well with ScioSense's gas sensor portfolio.

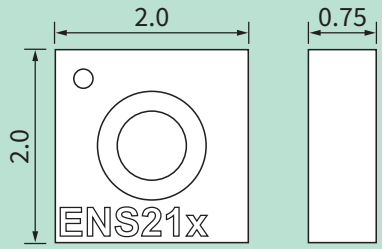
Features

- Application-specific accuracies: see table below
- Lowest power consumption: 40nA stand-by current
- Fastest response times: T: <1s; RH: <3s

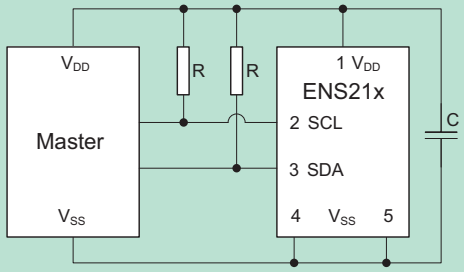
Benefits

- Cost-efficient, application-specific solutions
- Ideal for space-, time- and energy-critical designs
- Low peripheral BOM

Dimensions



Application circuit



Application Reference Table

	T - Accuracy	T - Range	RH - Accuracy	RH - Range	Target
ENS215	<±0.1°C	10 – 50°C	±0.8%	20 – 80%	Peak performance for instrumentation
	±0.15°C	-20 – 70°C	±1.1%	0 – 20%	
			±1.5%	80 – 95%	
ENS213A	±0.15°C	0 – 70°C	±1%	60 – 95%	Premium accuracy at high humidity for automotive, appliances and cold-chain management
			±1.5%	30 – 60%	
			±2.5%	Otherwise	
ENS212	±0.15°C	-20 – 70°C	±1.5%	10 – 90%	Premium consumer, appliances, IoT devices, building automation and HVAC
			±2%	Otherwise	
ENS211	±0.15°C	0 – 70°C	±2%	10 – 90%	Consumer, appliances, smarthome, IoT devices & wearables
			±3%	Otherwise	
ENS210A	±0.15°C	0 – 70°C	±2%	0 – 85%	All-purpose automotive grade device
			±3%	85 – 95%	

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