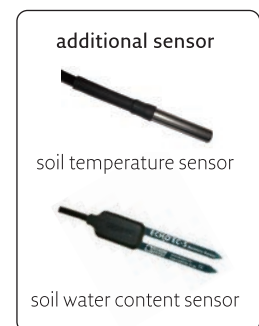
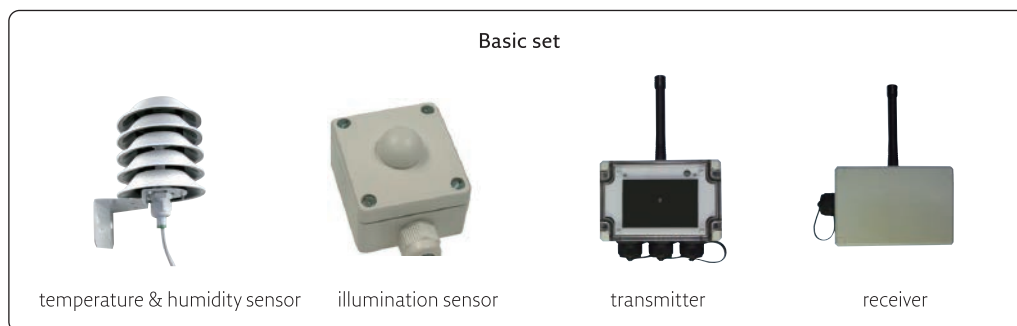
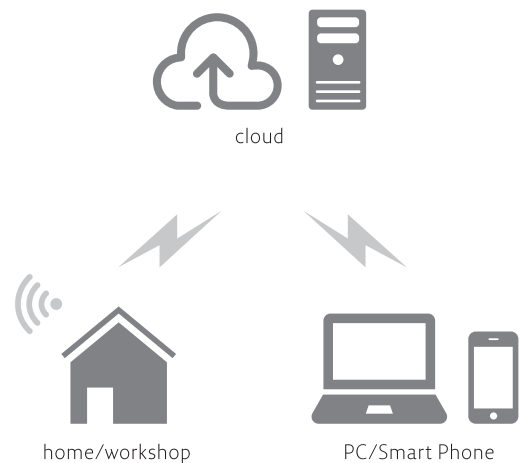
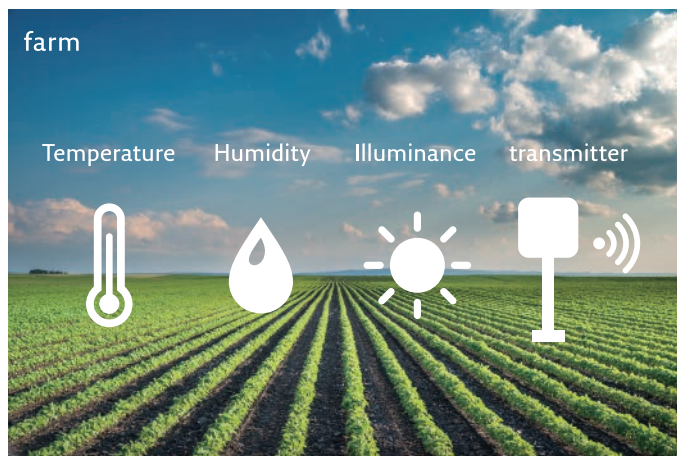


# LPWA Outdoor Environment Monitoring System NSOS-100

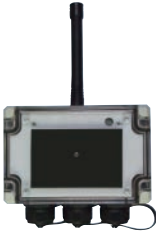
This system provides farm's climate data such as temperature, humidity, illumination and soil temperature which are very important information to cultivate agricultural plants. This system is using LPWA radio communication technology and self-powered system, so easy to install in any field.





## Features


- Built-in solar cell, no need to change battery and no need to connect power line
- Long range radio communication\*
- Waterproof and dust-proof (IP67)
- Temperature & humidity sensor and illumination sensor are included with basic set
- many kinds of sensor is available


(\* ) Ideal outdoor connections, radio transmission range can be 2km, however it depends on installed condition and weather.


<b>Transmitter SX-95ER101</b>  	Radio Frequency	925.0MHz
	Modulation	GFSK
	Data Rate	1.25kbps
	Antenna	Monopole Antenna
	Power	built-in solar cell
	operating time ( without light)	2 weeks
	Data transmit interval	15 minutes
	Sensor Interface	Original waterproof interface (RJ45)
	Support Sensors	Temperature and Relative Humidity Sensor, Illumination Sensor, Soil Temperature, Soil Water Volume Sensor
	Operating Temperature	-20°C ~ +60°C
	Size / Weight	W:80mm, D:120mm, H:56mm (w/o antenna and connectors) / 310g

<b>Receiver SX-95ER102</b>  	Host Interface	Original waterproof Interface
	Supported Antenna	Monopole antenna (+2dBi) / Flat panel antenna (+14dBi)
	Operating Temperature	-20°C ~ +60°C
	Transmission range	- Ideal outdoor connections with no obstruction, free line of sight omni-directional antenna: 2 ~ 3km / directional antenna: 5 ~ 7km - Outdoor connections with obstruction City: Up to 400m
	Size / Weight	W:80mm, D:120mm, H:56mm (w/o antenna and connector) / 230g

<b>Outdoor air Temperature &amp; Humidity sensor SX-95ER201</b>  	Temperature measurement range	-20°C ~ +60°C
	Temp. measurement accuracy / resolution	±0.5°C (at 25°C) / 0.1°C
	Relative Humidity Measurement Range	0% r.h. ~ 100% r.h.
	Relative Humidity Measurement accuracy / resolution	±5% r.h. (20% ~ 80%) / 0.4% r.h.
	Sensor Interface	Original waterproof Interface (RJ45)
	Operating Temperature	-20°C ~ +60°C

<b>Outdoor Illumination Sensor SX-95ER202</b>  	Illumination Measurement Range	0 Lux ~ 100,000 Lux
	Measurement Accuracy / Resolution	±5% (incandescent light sources) / 25 Lux
	Sensor Interface	Original waterproof Interface (RJ45)
	Operating Temperature	-20°C ~ +60°C

<b>Soil Temperature Sensor SX-95ER203</b>  	Measurement Range	-40°C ~ +60°C
	Measurement Accuracy / Resolution	±0.5°C / 0.4°C
	Sensor Interface	Original waterproof Interface (RJ45)
	Operating Temperature	-40°C ~ +60°C

<b>Soil water content sensor SX-95ER204</b>  	Measurement Range	0%VWC ~ 100%VWC (Relative)
	Measurement Accuracy / Resolution	±5%VWC / 0.4%VWC
	Sensor Interface	Original waterproof Interface (RJ45)
	Operating Temperature	-40°C ~ +50°C

Accessories: - Direction Antenna (to improve radio transceiver range)  
 - Y junction cable : (to expand sensor interface)

## Contact

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