

Soil Moisture & EC Sensor

OVERVIEW:

The Dragino SE01series is a [Soil Moisture & EC Sensor](#) for IoT of Agriculture. It is designed to measure the soil moisture of saline-alkali soil and loamy soil. The soil sensor uses FDR method to calculate the soil moisture with the compensation from soil temperature and conductivity. It also has been calibrated in factory for Mineral soil type.

It detects Soil Moisture, Soil Temperature and Soil Conductivity, and uploads the value via wireless to [LoRaWAN](#), [NB-IoT](#), [LTE-M](#), or [LTE CAT-1](#) IoT Server.

With [built-in BLE configuration](#) and [wireless OTA firmware updates](#), the SE01 is simple to set up and maintain.

To support various deployment scenarios, the SE01 offers multiple power options including [8,500 mAh or 19,000 mAh high-capacity non-rechargeable battery](#), [1,000 mAh rechargeable Li-ion battery](#), as well as a [solar-powered version](#) with a rechargeable Li-ion battery for long-term, maintenance-free operation.



Features:

- Monitor Soil Moisture
- Monitor Soil Temperature
- Monitor Soil Conductivity

Applications:



Green House



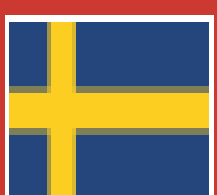
Orchard Nursery



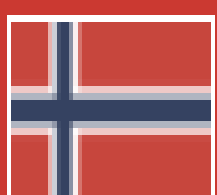
Farmland



Soil Research



SE



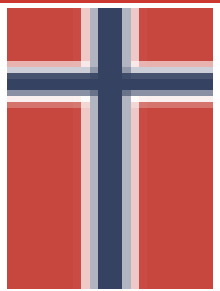
NO

Direktronik AB | Box 234, 149 23 Nynäshamn | Besöksadress Konsul Johnsons väg 15 149 45 Nynäshamn

Telefon 08 52 400 700 | Fax | Epost info@direktronik.se | Org.nr 556281-9663 | Bankgiro 922-0179

Wireless & Battery Selection

	LB	LB2	LS	NB	NB2	NS	CB	CB2	CS	KS	KN
Wireless	LoRaWAN	LoRaWAN	LoRaWAN	NB-IoT	NB-IoT	NB-IoT	NB-IoT & LTE-M	NB-IoT & LTE-M	NB-IoT & LTE-M	LTE CAT-1	LTE CAT-1
Module	LA66	LA66	LA66	BC660K-GL	BC660K-GL	BC660K-GL	BG95-M2	BG95-M2	BG95-M2	EG800xx	EG800xx
Frequency Band	EU433, CN470, EU868, IN865, KR920, MA869, AU915, US915, AS923-1, AS923-2, AS923-3, AS923-4	EU433, CN470, EU868, IN865, KR920, MA869, AU915, US915, AS923-1, AS923-2, AS923-3, AS923-4	EU433, CN470, EU868, IN865, KR920, MA869, AU915, US915, AS923-1, AS923-2, AS923-3, AS923-4	CAT-NB2: B1/B2/B3/B4/B5/B6/B12/B13/B17/B18/B19/B20/B25/B28/B66/B70/B85	CAT-NB2: B1/B2/B3/B4/B5/B6/B12/B13/B17/B18/B19/B20/B25/B28/B66/B70/B85	CAT-NB2: B1/B2/B3/B4/B5/B6/B12/B13/B17/B18/B19/B20/B25/B28/B66/B70/B85	CAT-NB2: B1/B2/B3/B4/B5/B8/B12/B13/B18/B19/B20/B25/B28/B66/B71/B85 LTE-M: B1/B2/B3/B4/B5/B8/B12/B13/B18/B19/B20/B25/B26/B27/B28/B66/B85	CAT-NB2: B1/B2/B3/B4/B5/B8/B12/B13/B18/B19/B20/B25/B28/B66/B71/B85 LTE-M: B1/B2/B3/B4/B5/B8/B12/B13/B18/B19/B20/B25/B26/B27/B28/B66/B85	CAT-NB2: B1/B2/B3/B4/B5/B8/B12/B13/B18/B19/B20/B25/B28/B66/B71/B85 LTE-M: B1/B2/B3/B4/B5/B8/B12/B13/B18/B19/B20/B25/B26/B27/B28/B66/B85	EU: For European, Asia, Australia, LTE-FDD: B1/3/5/7/8/20/28 LA: For Latin America, LTE-FDD: B2/3/4/5/7/8/28/66 NA: For North America, LTE-FDD: B2/4/5/12/13/66	EU: For European, Asia, Australia, LTE-FDD: B1/3/5/7/8/20/28 LA: For Latin America, LTE-FDD: B2/3/4/5/7/8/28/66 NA: For North America, LTE-FDD: B2/4/5/12/13/66
Uplink Method	LoRaWAN, OTAA, ABP	LoRaWAN, OTAA, ABP	LoRaWAN, OTAA, ABP	MQTT, MQTTs, TCP, UDP or CoAP	MQTT, MQTTs, TCP, UDP or CoAP	MQTT, MQTTs, TCP, UDP or CoAP	MQTT, MQTTs, TCP, UDP or CoAP	MQTT, MQTTs, TCP, UDP or CoAP	MQTT, MQTTs, TCP, UDP or CoAP	MQTT, MQTTs, TCP or UDP	MQTT, MQTTs, TCP or UDP
Enclosure	Type B	Type B2	Type S	Type B	Type B2	Type S	Type B	Type B2	Type S	Type S	Type N
Battery	8500mAh	19000mAh	3000mAh	8500mAh	19000mAh	3000mAh	8500mAh	19000mAh	3000mAh	3000mAh	1000mAh
Battery Type	Li-SOCl2	Li-SOCl2	Li-ion	Li-SOCl2	Li-SOCl2	Li-ion	Li-SOCl2	Li-SOCl2	Li-ion	Li-ion	Li-ion
Rechargeable	--	--	Yes	--	--	Yes	--	--	Yes	Yes	Yes
Solar Panel	--	--	Yes	--	--	Yes	--	--	Yes	Yes	--
Solar Panel Power	--	--	0.9W	--	--	0.9W	--	--	0.9W	0.9W	--
DC Connector	--	--	Optional	--	--	Optional	--	--	Optional	Optional	Provides 1.2V DC power
GNSS	--	--	--	--	--	--	Yes	Yes	Yes	--	--
BLE Config	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
IP Rate	IP66	IP66	IP66	IP66	IP66	IP66	IP66	IP66	IP66	IP66	IP54



SENO