Current Sensor Converter

OVERVIEW:

The Dragino CS01 series is 4 Channels current sensor converter. It can convert the reading from current sensors and upload to IoT server via LoRaWAN, NB-IoT, LTE-M, or LTE CAT-1 Network.

CS01 can be used to monitor the machine running status and analyze power consumption trends.

The CS01 supports maximum 4 current sensors. The current sensors are detachable and can be replaced with different scales.

With built-in BLE configuration and wireless OTA firmware updates, the CS01 is simple to set up and maintain.

To support various deployment scenarios, the CS01 offers multiple power options — including 8,500 mAh or 19,000 mAh high-capacity non-rechargeable battery, 1,000 mAh rechargeableLi-ion battery, as well as a solar-powered version with a rechargeable Li-ion battery for long-term, maintenance-free operation.



Model CS01 series doesn't include probes.
Probes are purchased seperately

Features:

- Split core current transformer
- Supports maximum 4 current sensors
- Support various current sensor Ratio: 100A/50mA, 300A/50mA, 600A/50mA
- Monitor the machine running status
- Analyze power consumption trends
- Current Alarm

Applications:



Machine Monitor



Car Charging Pile



Solar Inverter



Building Electric Monitor

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Current Sensor Converter -- Probe Option

SCT013G-D-100:

※ Split core current transformer
※ Spec: 100A/50mA
※ φ16mm Aperture
※ Accuracy: 1%
※ Operating Temperature: -25°C ~ 60°C
※ Storage Temperature: -30°C ~ 90°C



SCT024-300:

※ Split core current transformer
※ Spec: 300A/50mA
※ φ24mm Aperture
※ Accuracy: 1%
※ Operating Temperature: -25°C ~ 60°C
※ Storage Temperature: -30°C ~ 90°C



SCT036-600:

※ Split core current transformer
※ Spec: 600A/50mA
※ φ36mm Aperture
※ Accuracy: 1%
※ Operating Temperature: -25°C ~ 60°C
※ Storage Temperature: -30°C ~ 90°C



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Wireless & Battery Selection

	LB	LB2	LS	NB	NB2	NS	CB	CB2	CS	FB	FB2	FS	KS	KN
Wireless	LoRaWAN	LoRaWAN	LoRaWAN	NB-IoT	NB-IoT	NB-IoT	NB-IoT & LTE-M	NB-IoT & LTE-M	NB-IoT & LTE-M	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	NRF9151	NRF9151	NRF9151	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/ B8/B12/B13/B17/ B18/B19/B20/B25/ B28/B66/B70/B85	CAT-NB2: B1/B2/B3/B4/B5/ B8/B12/B13/B17/ B18/B19/B20/B25/ B28/B66/B70/B85	CAT-NB2: B1/B2/B3/B4/B5/ B8/B12/B13/B1/ 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	CAT-NB1/NB2: B1/B2/B3/B4/B5/B8/ B12/B13/B17/B19/B20/ B25/B26/B28/B65/B66/ B85 LTE-M: B1/B2/B3/B4/B5/B8/ B12/B13/B18/B19/B20/ B25/B26/B28/B66/B85	CAT-NB1/NB2: B1/B2/B3/B4/B5/B8/ B12/B13/B17/B19/B20/ B25/B26/B28/B65/B66/ B85 LTE-M: B1/B2/B3/B4/B5/B8/ B12/B13/B18/B19/B20/ B25/B26/B28/B66/B85	CAT-NB1/NB2: B1/B2/B3/B4/B5/B8/ B12/B13/B17/B19/B20/ B25/B26/B28/B65/B66/ B85 LTE-M: B1/B2/B3/B4/B5/B8/ B12/B13/B18/B19/B20/ B25/B26/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, 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 B	Type B2	Type S	Type S	Type N
Battery	8500mAh	19000mAh	3000mAh	8500mAh	19000mAh	3000mAh	8500mAh	19000mAh	3000mAh	8500mAh	19000mAh	3000mAh	3000mAh	1000mAh
Battery Type	Li-SOCI2	Li-SOCI2	Li-ion	Li-SOCI2	Li-SOCI2	Li-ion	Li-SOCI2	Li-SOCI2	Li-ion	Li-SOCI2	Li-SOCI2	Li-ion	Li-ion	Li-ion
Rechargeable	--	--	Yes	--	--	Yes	--	--	Yes	--	--	Yes	Yes	Yes
Solar Panel	--	--	Yes	--	--	Yes	--	--	Yes	--	--	Yes	Yes	--
Solar Panel Power	--	--	0.9W	--	--	0.9W	--	--	0.9W	--	--	0.9W	0.9W	--
DC Connector	--	--	Optional	--	--	Optional	--	--	Optional	--	--	Optional	Optional	Provides 12V DC power
GNSS	--	--	--	--	--	--	Yes	Yes	Yes	Yes	Yes	Yes	--	--
BLE Config	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
IP Rate	IP66	IP66	IP66	IP66	IP66	IP66	IP66	IP66	IP66	IP66	IP66	IP66	IP66	IP54

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Enclosure Type

Enclosure Type B



- Battery: 8500 mAh
- None-rechargeable
- Dimension: 118 x 57 x 47 mm

Enclosure Type B2



- Battery: 19000 mAh
- None-rechargeable
- Dimension: 145 x 105 x 45 mm

Enclosure Type S



- Battery: 3000 mAh
- Rechargeable
- 0.9w Solar Panel
- Dimension: 108 x 102 x 40 mm

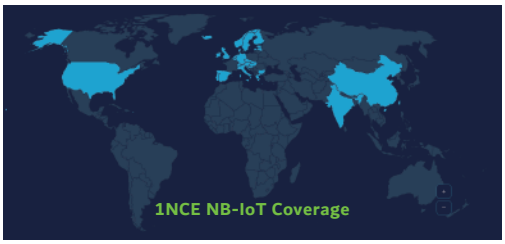
Enclosure Type N

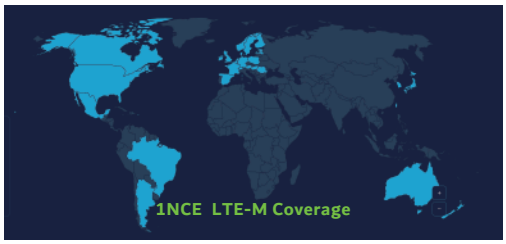


- Battery: 1000 mAh
- Rechargeable
- Provides 12V DC power
- Dimension: 118 x 57 x 47 mm

What is 1T version for Cellular version?

The 1T version of NB-IoT/LTE-M/LTE CAT-1 4-channel Current Sensor Converter is with 1) 1NCE SIM Card & 2) ThingsEye Pre-configured.
1NCE SIM Card (10 Years Cellular service with 500MB Data Traffic, Enough for devices to uplink 10 years at 1hour interval).

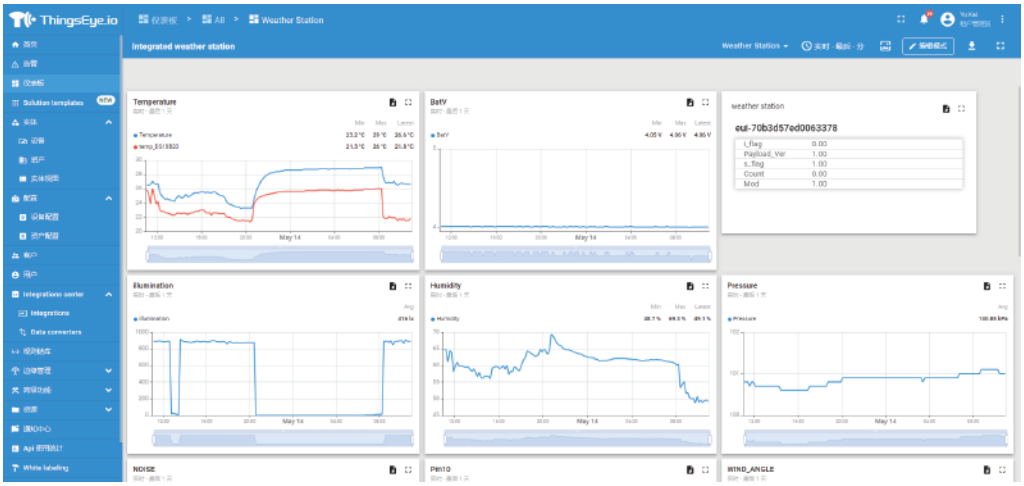






ThingsEye.io platform:

1T version with ThingsEye IoT service pre-installed. This save a lot of work from user side to confgure IoT server.
Below is Dash Board is the demo in ThingsEye.io.



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Ordering Information

Example: CS01-LB-EU868

Model Name:

CS01 (Supports up to 4 current sensors)

Wirless Tech:

L: LoRaWAN
N: NB-IoT
C: NB-IoT & LTE-M
F: NB-IoT & LTE-M
K: LTE CAT-1

Battery Type:

B: 8500 mAh Li-SOIC2 Battery
B2: 19000 mAh Li-SOIC2 Battery
S: Solar Panel + 3000 mAh Li-ion Battery
N: 1000 mAh Li-ion Battery

Frequency Band or Cellular SIM:

Frequency Band:

For LoRaWAN version: EU433, CN470, EU868, IN865, KR920, MA869, AU915, US915, AS923-1, AS923-2, AS923-3, AS923-4

For CAT-1 version:
EU: For European, Asia, Australia
LA: For Latin America
NA: For North America

Cellular SIM option (For NB-IoT, LTE-M, CAT-1):

GE -- General version (Exclude SIM card)
1T -- With 1NCE & ThingsEye Pre-configured

Current sensor options (Order Seperately):

SCT013G-D-100: φ16mm Aperture, 100A/50mA
SCT024-300: φ24mm Aperture, 300A/50mA
SCT036-600: φ36mm Aperture, 600A/50mA

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