Controlant

Saga Standard

General overview

Product name	Saga
Model Name	Saga
Model Type	Standard
Dimensions	25mm × 61mm × 98mm
	0.98in × 2.40in × 3.86in
Weight	180g
	6.35oz
Housing	ABS plastic enclosure
Available information	Temperature, geographical location, battery status, light events
Ingression protection rating	IP55
Flight detection	Yes
Display	Yes, E Ink

Calibration

Calibration points	-20°C ±1°C
	+15°C ±0.5°C
	+50°C ±1°C
Calibration accuracy	**±0.5°C** at -10°C to +45°C
	±1°C at +45°C to +50°C
	±1°C at -20°C to -10°C
Calibration certificate	Available upon request

Technical data

Battery type	Rechargeable NiMH battery, 2500mAh
Nominal energy	9Wh
Battery life	Device transmits data for 20–110 days on a single charge, depending on cloud reporting interval, as detailed on page 2.
Internal memory	Storage capacity of 150 days of temperature measurements (when recorded at 10-minute intervals).
Charging	Via attached USB-A cable
Backup data download	Via attached USB-A cable
Cellular network type	2G, 3G and 4G (LTE)
Cellular coverage	Global
Location positioning	Cellular.
	Wi-Fi 2.4Ghz WPS (Receive only)

Measurement data

Measurement interval Sampling rate	10 minutes
Data reporting	Device needs to wake up and establish a connection to upload measurement data to the Controlant cloud.
Wake-up schedule	Adjustable from 1h to 24h frequency. Device wakes up when excursion triggers alarm, regardless of schedule.
Standard operating temperature range Logs temperature: Yes Cloud connection: Can be established Battery life: Normal Display: Fully functional (above 0°C)	-20°C to +50°C
Limited operating temperature ranges Logs temperature: Yes Cloud connection: Disabled below -20°C Battery life: Reduced Display: Not functional	-30°C to -20°C +50°C to +70°C
Resolution	0.1°C
Long-term drift Estimate at mid-range temperature	<0.1°C / year

Certifications and approvals

Approvals	CE, FCC, IC, NOM, KC
Aviation compliance	IATA, FAA and EASA

Manufacturer

Name	Controlant hf.
Address	Smáratorg 3, 201 Kópavogur, Iceland

Saga Standard

Covering the cold to ambient range, -20°C to +50°C, this real-time device supports a wide array of temperature-sensitive products. It ensures continuous monitoring, traceability, and compliance across the cold chain, protecting product integrity and reducing risk during transport and storage.

Battery type
The device is powered by a rechargeable NiMH battery, 2500 mAh. NiMH batteries are not considered dangerous goods. The battery life cycle is at least 70 charge cycles.

Battery life
A fully charged device on a 12-hour wake-up interval can be expected to upload data and report alarms for at least 110 days while monitoring an active shipment within the operating temperature range.

The device enters Hibernation Mode when the battery level reaches 5% or less, at which stage it stops attempting to connect to the Controlant cloud. In Hibernation Mode, it still records data and stores it in internal memory until the battery is depleted or the device is recharged.

The battery life depends on the set wake-up interval, as shown in the table below.

Wake-up interval	Battery life
1 hour	20 days
2 hours	35 days
3 hours	45 days
6 hours	75 days
12 hours	110 days
24 hours	>110 days