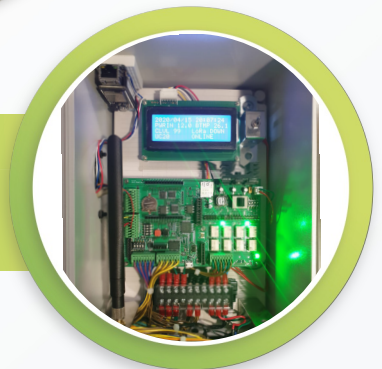## Part of the eComo System…

The **eComo04 LP** adds a new continuous monitoring core optimized for 4 analogue inputs (voltage or current mode), 4 digital inputs and 4 configurable additional power supplies. The eComo04 LP reduces its size even more than the eComo04 Compact giving a perfect solution when the goal is covering a large number of metering spots with little number of sensors.

This new device designed by **NIHON KASETSU** and manufactured in Japan, covers the reading and processing of the signal coming from sensors, shows the real-time data on a LCD display and send the encrypted information to our server, accessible from the web-based User Platform. The housing is made of high resistance plastic with IP65 protection for outdoor purposes and ready to work in any industrial environment. All inputs, outputs and external connections are through high quality waterproof metal connectors.

- Low power consumption, optimal for solar kits
- Reduced size, extended connectivity
- Ideal solution for distributed measuring points
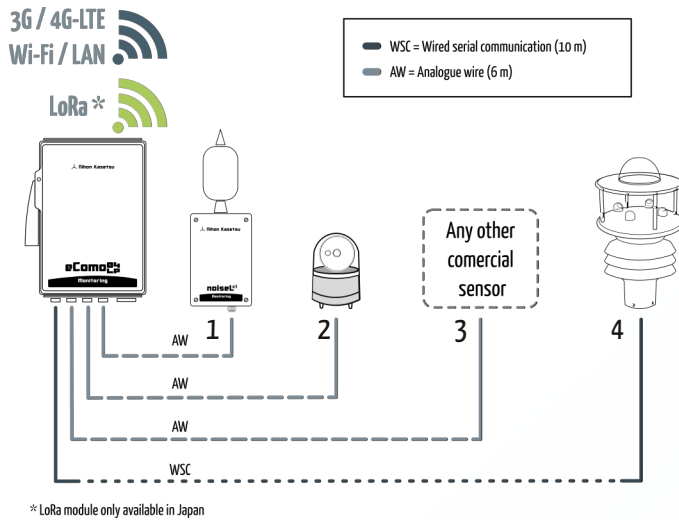
Communications Modules

The electronics architecture has been fully designed to have the same efficiency as the eComo04 unit with a microcontroller-based system. A simpler fixed hardware setup where the communication module is embedded in the powerful main board mantains a remarkable **efficiency** in matter of **power consumption**.

The communication stage allows internet connection through **WiFi**, wired **LAN** or a **3G/4G SIM** card. Once installed, the configuration of the device is performed in the Admin Platform, where you can check the rest of your eComo fleet. Triggering power outputs based on a programmed threshold level of an input is a common task (light signalling, sound alarm) that works in an autonomous way, also E-mail alerts can be sent when the thresholds are reached. The device has a protection algorithm to storage the raw data in case of a connectivity failure, that will be sent to the server once it is back online, guarantying no data is lost.

WiFi/ LAN

LoRa*

3G/ 4G-LTE

*Option only available in Japan

Setup example

3G / 4G-LTE
Wi-Fi / LAN
LoRa *

| WSC = Wired serial communication (10 m) |
| AW = Analogue wire (6 m) |

eComo24 Monitoring

noiseL Monitoring

Any other comercial sensor

AW 1
AW
AW
WSC

2 3 4

* LoRa module only available in Japan

1 Nihon Kasetsu sensors
Connect any Nihon Kasetsu sensor(air quality, noise, temperature, etc).

2 Patlite signaling
Choose from diferent beacons and signaling ligths to best suit your project.

3 Any commercial sensor
Thanks to the voltage and current input modes any commercial sensor can be integrated into the eComo system.

4 GILL Weather stations through RS323C
Monitor the wind speed and direction, relative humidity and more.

Specifications

eComo04 LP

Power Supply

Nominal Power CPU Consumption	1	W
Power Consumption depending on the sensors	2 ÷ 12	W
Power Supply mode	12	V DC
Nominal Current	0,07	A
CPU Peak Current	1	A

Analog inputs

Ports number	4	
Sampling Frequency	1 (max.)	Hz
Voltage Input Mode	0 ÷ ±5 / ±10	VDC
Current Input Mode	4 ÷ 20	mA
ADC Bit Depth	16	Bit
Accuracy	1	mV DC (5V@25ºC)

Analog ports power supply*

Output 12 VDC

Load current	1 max	A

Output 9 VDC

Load current	1 max	A

Output 6 VDC

Load current	1 max	A

Output 5 VDC

Load current	1 max	A

Digital Inputs

Connectors	4	
H level Voltage	3,3 ÷ 12	VDC
L lever Voltage	0 ÷ 1,2	VDC
Maximun input current	9	mA

Additional Power supply

Connectors	4	
Voltage	12	VDC
Maximun current *	1	A

Communication options

LAN	
WiFi	
3G/ 4G LTE	
LoRa	(option only available in Japan)
RS232C for Gill Weather Stations	

Communication rate

Minimun transmission Interval	10	min

Casing

Dimensions	280 x 190 x 141	mm
Weight	2	Kg

Certifications

CE / RoHS / EMC / WEEE

Ambient conditions

Operating temperature	-20～50	ºC
Storage conditions	-30～70	ºC
Humidity	90	%RH @ 60ºC
IP	65	

Nihon Kasetsu
50 years of passion for excellence

ONLY PREMIUM COMPONENTS INSIDE

Made in Japan