

9.

**SYNC INJECTORS  
BUYING GUIDE**

## Choose GigaSync if:

- you have to power up to 12 devices and not occupy more than 1U;
- you plan to expand your plant and therefore prefer a modular system;
- you want to be able to hot swap all modules;
- you want to be able to remotely manage all connected devices;
- you want to power the devices at different voltages;
- you want to choose which devices to provide sync to;



**GIGA**.SYNC

## Choose LiteSync if:

- you need to power up to 4 devices per rack unit;
- you can power 2 devices with the same voltage;
- you want to use Cambium Sync only;



**LITESYNC**

**1** Base Unit

**2** Integrated GPS

**3** Output Cartridges

**1**

**2**



1

## Base Unit

Plug in and start setting up your GigaSync. You have a simple and immediate Graphic User Interface, in which all data and commands are exactly where you want them to be. You can also connect to Gigasync via SNMP and CLI.

2

## Integrated GPS

Built-in GPS allows you to inject Cambium / Canopy Sync to devices that require it. Select the required synchronization for each port. You can also use the pulse from uGPS, cnPulse or another GigaSync via the SYNC-IN port.

3

## Output Cartridges

Ensure the right power to your devices. You can choose between PoE (with or without sync) and Bipolar Terminals. You can power each cartridge independently, with different voltages and polarity. With PoE you can conveniently select the pinout for each port with the GigaKeys.



1

**Base Unit**

## The control unit is integrated

Supply power to the Base Unit via bipolar terminals or PoE (802.3af compatible).  
Connect the ethernet connector on the back and you can:

- change the configuration;
- remotely monitor the operating status;
- send on / off commands, enable synchrony;
- read the system logs.



## 2

### Integrated GPS

#### The GPS receiver is integrated

Connect the GPS antenna to receive\*:

- synchronization impulse;
- latitude / longitude / altitude;

Or connect a source of your choice to the SYNC-IN connector\*\*:

- uGPS
- cnPulse
- SYNC-OUT of another GigaSync

From the interface you can select the sync source to use and check the positioning data.

The SYNC LED on the front will indicate the actual presence of the pulse for the selected source.

(\*)The antenna must be purchased separately.

(\*\*)The cable to acquire the sync pulse through the SYNC INPUT port must be purchased separately.

## 3

### Output Cartridges

### Select the cartridges

All cartridges are protected against overvoltage, overcurrent and short circuit. Each cartridge has 2 power inputs with a range of 21.4 ~ 57V; the inputs are redundant and galvanically isolated from the other cartridges and from the Base Unit. These features allow you to create the combination that best suits your needs. Each cartridge is also hot-pluggable / hot-swappable, allowing you to change the configuration on field. With a peak power of 600W per cartridge you can power even the most energy-intensive devices.

Determine which OUTPUT cartridges you need

Functionality	GS-G-PoE	GS-G-PoE-CS	GS-G-TER
PoE	✓	✓	X
Cambium / Canopy Sync	X	✓	X
Up to 3A per port	✓	✓	✓
Configurable pinout	✓	✓	X

# GigaKey



PART NUMBER	GS-K-9.S	GS-K-AB	GS-K-B	GS-K-BR
<b>Name on KEY</b>	9.SYNC	A+B	B	Brp
<b>PoE Mode</b>	A + B reverse pol.	A+B	B	B reverse pol.
<b>1,2 wires</b>	DC +	DC +		
<b>3,6 wires</b>	DC -	DC -		
<b>4,5 wires</b>	DC -	DC +	DC +	DC -
<b>7,8 wires</b>	DC +	DC -	DC -	DC +
<b>Cambium 450m</b>	•			
<b>Cambium 450i</b>	•	•		
<b>Cambium 450</b>				•
<b>IEEE 802.3af/at</b>		•		
<b>10/100Base-T PoE</b>			•	
<b>1000Base-T PoE</b>	•	•		
<b>Intracom / Siae</b>	•	•		
<b>Mikrotik/Ubiquiti</b>		•	•	
<b>Ceragon</b>		•		

\*These are just some of the devices that can work with GigaSync. The list is very long, if you want to know if your equipment can connect to GigaSync, do not hesitate to contact us.



## Ordering Guide

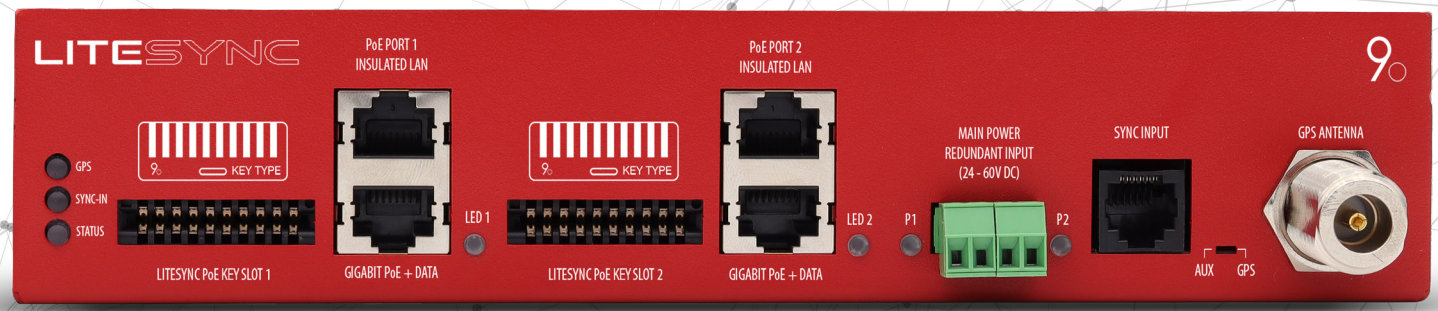
Product name	Description
GS-B-V2	GigaSync v2 Base Unit with integrated controller and GPS receiver. Handles up to 3 cartridges PoE and/or TER, 12A each, isolated. Sync IN compatible with uGPS, cnPulse and Cascade Sync. New in v2: more powerful CPU, software upgrade and reboot without power outage, precise voltage measurement, fully hot-swap, no diodes voltage drop.
GS-G-PoE	POE cartridge for GS-B-V2. 4 Eth. Ports, 150W per port. For the configuration of each port a GigaKey hardware key is needed.
GS-G-PoE-CS	POE cartridge for GS-B-V2. 4 Eth. Ports, 150W per port. For the configuration of each port a GigaKey hardware key is needed. (CambiumSync, Canopy Sync Compatible).
GS-G-TER	Terminals cartridge for GS-B-V2. 4 Terminal Ports, 150W per port.
GS-K-9.S	GigaKey hardware configuration Key for GS-G-POE/GS-G-POE-CS/GS-LT. Mode 9.Sync, suitable for 450m, 450i, Siae, Intracom.
GS-K-B	GigaKey hardware configuration Key for GS-G-POE/GS-G-POE-CS/GS-LT. Mode B, suitable for Mikrotik, Ubiquiti.
GS-K-AB	GigaKey hardware configuration Key for GS-G-POE/GS-G-POE-CS/GS-LT. Mode A+B, suitable for 802.3af/at devices.
GS-K-BR	GigaKey hardware configuration Key for GS-G-POE/GS-G-POE-CS/GS-LT. Mode B Reverse, suitable for Cambium 450.
GS-GPSA	Universal GPS Antenna with Bracket Mounting Kit.

# LITESYNC

**1** Base Unit

**2** Integrated GPS

**3** OUTPUT PoE Connector



# LITESYNC

1

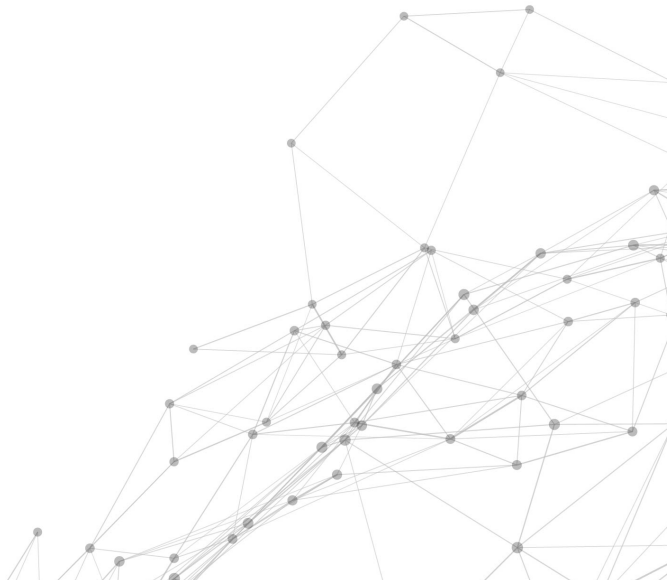
**Base Unit**

## On LiteSync everything is integrated

LiteSync is a stand-alone / all-in-one device.

Supply power to the device via bipolar terminals and the PoE output ports are ready, based on the inserted GigaKeys.

You can rack-mount a single LiteSync with the supplied bracket, or stack a second one next to it to make the most of the single rack unit.



## 2

### Integrated GPS

#### The GPS receiver is integrated

Connect the GPS antenna supplied with LiteSync to receive the sync pulse. Alternatively, connect a source of your choice to the SYNC-INPUT connector\*:

- uGPS
- cnPulse
- SYNC-OUT of another GigaSync

The AUX-GPS switch allows you to select the sync source to use. The GPS and SYNC-IN LEDs on the front indicate the actual presence of the pulses.

(\*) The cable to acquire the sync pulse through the SYNC INPUT port must be purchased separately.

3

## OUTPUT PoE Connector

### Select the GigaKey

Both LiteSync outputs are protected against overvoltage, overcurrent and short circuit, with a maximum current of 3A per port.

With the hardware keys you can independently select the perfect pinout for your applications.

The galvanic isolation between the LAN and PoE ports ensures the best protection for the connected devices.

Cambium Sync is automatically supplied to connected devices, in the presence of a valid pulse.



# GigaKey



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<b>PoE Mode</b>	A + B reverse pol.	A+B	B	B reverse pol.
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<b>4,5 wires</b>	DC –	DC +	DC +	DC –
<b>7,8 wires</b>	DC +	DC –	DC –	DC +
<b>Cambium 450m</b>	•			
<b>Cambium 450i</b>	•	•		
<b>Cambium 450</b>				•
<b>IEEE 802.3af/at</b>		•		
<b>10/100Base-T PoE</b>			•	
<b>1000Base-T PoE</b>	•	•		
<b>Intracom / Sia</b>	•	•		
<b>Mikrotik/Ubiquiti</b>		•	•	
<b>Ceragon</b>		•		

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## Ordering Guide

Product name	Description
GS-LT	2 Gigabit Ethernet Ports Surge Protector Injector with Cambium Synchronization, Max Voltage 60 Volts, Max Current 2A per Port, Universal GPS Antenna with Bracket Mounting Kit Included. For the configuration of each port a GigaKey hardware key is needed.
GS-K-9.S	GigaKey hardware configuration Key for GS-G-POE/GS-G-POE-CS/GS-LT. Mode 9.Sync, suitable for 450m, 450i, Siae, Intracom.
GS-K-AB	GigaKey hardware configuration Key for GS-G-POE/GS-G-POE-CS/GS-LT. Mode A+B, suitable for 802.3af/at devices.
GS-K-B	GigaKey hardware configuration Key for GS-G-POE/GS-G-POE-CS/GS-LT. Mode B, suitable for Mikrotik, Ubiquiti.
GS-GPSA	Universal GPS Antenna with Bracket Mounting Kit.



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