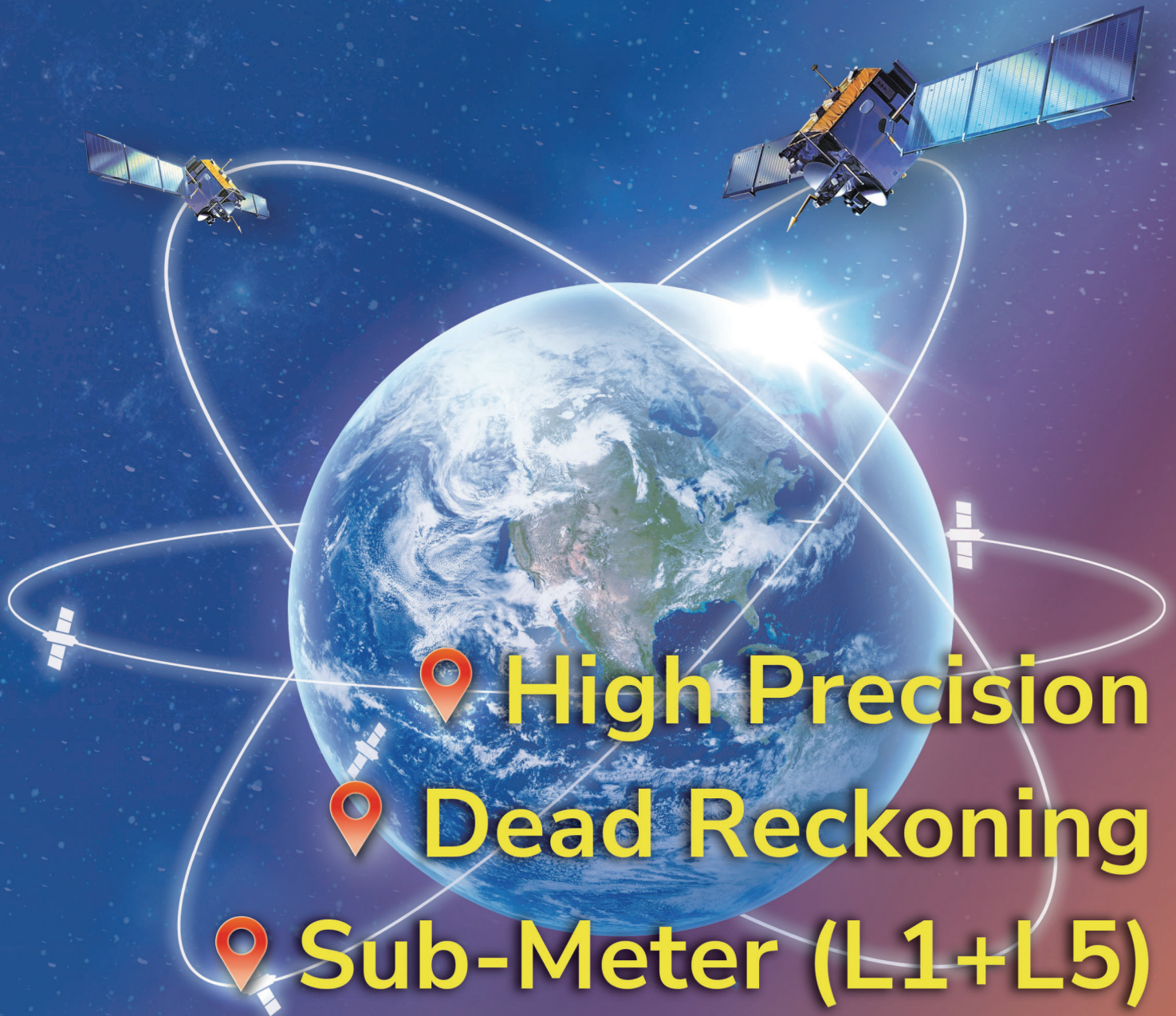


**LOCOSYS**

*GNSS Wireless & Communication*

# LOCOSYS

## GNSS / RTK Product Catalog



**High Precision**

**Dead Reckoning**

**Sub-Meter (L1+L5)**



# LOCOSYS Introduction

LOCOSYS Technology is a global leading company of satellite positioning module, we dedicate ourselves in the global market for more than 20 years, and now LOCOSYS has become No.1 leading company of GNSS/RTK solutions in Taiwan, and top 5 in the world. We provide high quality and reliable GNSS wireless solutions to fulfill customers' needs, with our own designing and manufacturing capability, LOCOSYS keep providing  $\alpha$ -level Global Navigation Satellite System (GNSS) high-precision positioning/orientation solutions to our global customers.

LOCOSYS in-house proprietary RTK solution (HW/SW) based on multi-band GNSS, is able to achieve centimeter level accuracy with high update rate certified by official Standard Instrument Control Library (SICL). With small form factor and low power consumption, it can be embedded to any platform, aiming for Mass Market RTK both in receiver (Rover) and reference (Base Station), to make RTK positioning become universal.

Quality is our No.1 priority, with **AEC-Q100/AEC-Q104** and **IATF 16949:2016/ISO 9001:2015**, we ensure the quality and sustainability of our products to meet customers' standards. Not only providing high quality product, **LOCOSYS also cares about our environment. As an international company with business all over the world, reducing carbon emissions will also be our goals to focus from 2023.** And with more than 20+ agent bases in worldwide. Not only can provide completed product information quickly but also give localized support and services efficiently.





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- 07 **USB Dongle**
- 08 **GNSS + Dead Reckoning**

**AEC-Q100**


**AEC-Q104**

**IATF 16949**




# 01 Module Solution


| GPS Module  | GP | GL | BD | GA | QZSS | IRNSS | Memory | Position Accuracy | VCC  | Interface | Dimension (mm)    |
|-------------|----|----|----|----|------|-------|--------|-------------------|------|-----------|-------------------|
| MC-1010-2RE | ■  | □  | □  | □  | ■    | □     | ROM    | 2.5m              | 3.3V | UART      | 10.1 x 9.7 x 2.0  |
| MC-1612-2RE | ■  | □  | □  | □  | ■    | □     | ROM    | 2.5m              | 3.3V | UART      | 16.0 x 12.2 x 2.2 |
| MC-1010     | ■  | □  | □  | □  | ■    | □     | Flash  | 2.5m              | 3.3V | UART      | 10.1 x 9.7 x 2.0  |
| MC-1612     | ■  | □  | □  | □  | ■    | □     | Flash  | 2.5m              | 3.3V | UART      | 16.0 x 12.2 x 2.2 |




MC-1010-2RE



MC-1010




MC-1612-2RE




MC-1612


| GNSS Module  | GP | GL | BD | GA | QZSS | IRNSS | Memory | Position Accuracy | VCC  | Interface | Dimension (mm)    |
|--------------|----|----|----|----|------|-------|--------|-------------------|------|-----------|-------------------|
| MC-1010-G/-B | ■  | ■  | ■  | ■  | ■    | □     | Flash  | 2.5m              | 3.3V | UART      | 10.1 x 9.7 x 2.0  |
| MC-1612-G/-B | ■  | ■  | ■  | ■  | ■    | □     | Flash  | 2.5m              | 3.3V | UART      | 16.0 x 12.2 x 2.2 |
| MC-1010-G2   | ■  | ■  | ■  | ■  | ■    | □     | Flash  | 2.5m              | 3.3V | UART      | 10.1 x 9.7 x 2.2  |




MC-1010-G




MC-1010-B



MC-1612-G




MC-1612-B




MC-1010-G2


| L1 GNSS Module | GP | GL | BD | GA | QZSS | IRNSS | Memory | Position Accuracy | VCC  | Interface               | Dimension (mm)    |
|----------------|----|----|----|----|------|-------|--------|-------------------|------|-------------------------|-------------------|
| MC-1010-18Q    | ■  | ■  | ■  | ■  | ■    | □     | Flash  | 1.5m              | 1.8V | UART/(I <sup>2</sup> C) | 10.1 x 9.7 x 2.2  |
| MC-1010-52Q    | ■  | ■  | ■  | ■  | ■    | □     | Flash  | 1.5m              | 3.3V | UART/(I <sup>2</sup> C) | 10.1 x 9.7 x 2.2  |
| MC-1612-52Q    | ■  | ■  | ■  | ■  | ■    | □     | Flash  | 1.5m              | 3.3V | UART/(I <sup>2</sup> C) | 16.0 x 12.2 x 2.4 |



MC-1010-18Q




MC-1010-52Q




MC-1612-52Q


| L1 + L5 GNSS Module | GP | GL | BD | GA | QZSS | IRNSS | L5 Signal | Memory | Position Accuracy | VCC  | Interface               | Dimension (mm)    |
|---------------------|----|----|----|----|------|-------|-----------|--------|-------------------|------|-------------------------|-------------------|
| MC-1010-V2a         | ■  | ■  | ■  | ■  | ■    | □     | GPS       | Flash  | 1.5m              | 1.8V | UART/(I <sup>2</sup> C) | 10.1 x 9.7 x 2.2  |
| MC-1010-V3a         | ■  | ■  | ■  | ■  | ■    | ■     | IRNSS     | Flash  | 1.5m              | 1.8V | UART/(I <sup>2</sup> C) | 10.1 x 9.7 x 2.2  |
| MC-1010-V2b         | ■  | ■  | ■  | ■  | ■    | □     | GPS       | Flash  | 1.5m              | 3.3V | UART                    | 10.1 x 9.7 x 2.2  |
| MC-1010-V3b         | ■  | ■  | ■  | ■  | ■    | ■     | IRNSS     | Flash  | 1.5m              | 3.3V | UART                    | 10.1 x 9.7 x 2.2  |
| MC-1612-V2b         | ■  | ■  | ■  | ■  | ■    | □     | GPS       | Flash  | 1.5m              | 3.3V | UART                    | 16.0 x 12.2 x 2.4 |
| MC-1612-V3b         | ■  | ■  | ■  | ■  | ■    | ■     | IRNSS     | Flash  | 1.5m              | 3.3V | UART                    | 16.0 x 12.2 x 2.4 |




MC-1010-V2a




MC-1010-V3a




MC-1010-V2b



MC-1010-V3b



MC-1612-V2b



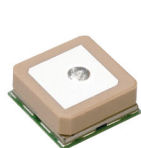
MC-1612-V3b

※ ■ GPS ■ GLONASS ■ BEIDOU ■ GALILEO ■ QZSS ■ IRNSS



# 02 Smart Antenna Solution

| GPS Smart Antenna | GP | GL | BD | GA | QZSS | IRNSS | Memory | Position Accuracy | VCC  | Interface | Dimension (mm)    |
|-------------------|----|----|----|----|------|-------|--------|-------------------|------|-----------|-------------------|
| LS2003C-2RE       | ■  | □  | □  | □  | ■    | □     | ROM    | 2.5m              | 3.3V | UART      | 15.5 x 15.5 x 6.6 |
| LS2003D-2RE       | ■  | □  | □  | □  | ■    | □     | ROM    | 2.5m              | 3.3V | UART      | 21.0 x 17.0 x 7.2 |
| LS2003E-2RE       | ■  | □  | □  | □  | ■    | □     | ROM    | 2.5m              | 3.3V | UART      | 22.0 x 22.0 x 8.4 |
| LS2003C           | ■  | □  | □  | □  | ■    | □     | Flash  | 2.5m              | 3.3V | UART      | 15.5 x 15.5 x 6.6 |
| LS2003D           | ■  | □  | □  | □  | ■    | □     | Flash  | 2.5m              | 3.3V | UART      | 21.0 x 17.0 x 7.2 |
| LS2003E           | ■  | □  | □  | □  | ■    | □     | Flash  | 2.5m              | 3.3V | UART      | 22.0 x 22.0 x 8.4 |
| LS20030-2RE       | ■  | □  | □  | □  | ■    | □     | ROM    | 2.5m              | 3.3V | USB       | 30.0 x 30.0 x 8.0 |
| LS20031-2RE       | ■  | □  | □  | □  | ■    | □     | ROM    | 2.5m              | 3.3V | TTL       | 30.0 x 30.0 x 8.0 |
| LS20032-2RE       | ■  | □  | □  | □  | ■    | □     | ROM    | 2.5m              | 3.3V | RS232     | 30.0 x 30.0 x 8.0 |
| LS20030U          | ■  | □  | □  | □  | ■    | □     | Flash  | 2.5m              | 3.3V | UART      | 15.5 x 15.5 x 6.6 |
| LS20031U          | ■  | □  | □  | □  | ■    | □     | Flash  | 2.5m              | 3.3V | UART      | 21.0 x 17.0 x 7.2 |
| LS20032U          | ■  | □  | □  | □  | ■    | □     | Flash  | 2.5m              | 3.3V | UART      | 22.0 x 22.0 x 8.4 |



LS2003C-2RE

LS2003C

LS20030U



LS2003D-2RE

LS2003D

LS20031U



LS2003E-2RE

LS2003E

LS20032U

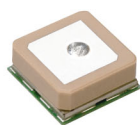


LS2003x-2RE

| GNSS Smart Antenna | GP | GL | BD | GA | QZSS | IRNSS | Memory | Position Accuracy | VCC  | Interface | Dimension (mm)    |
|--------------------|----|----|----|----|------|-------|--------|-------------------|------|-----------|-------------------|
| LS2003J-G          | ■  | ■  | □  | ■  | ■    | □     | Flash  | 2.5m              | 3.3V | UART      | 16.0 x 12.8 x 2.8 |
| LS2003C-G          | ■  | ■  | □  | ■  | ■    | □     | Flash  | 2.5m              | 3.3V | UART      | 15.5 x 15.5 x 6.0 |
| LS2003D-G          | ■  | ■  | □  | ■  | ■    | □     | Flash  | 2.5m              | 3.3V | UART      | 15.5 x 15.5 x 6.0 |
| LS2003E-G          | ■  | ■  | □  | ■  | ■    | □     | Flash  | 2.5m              | 3.3V | UART      | 22.0 x 22.0 x 8.4 |
| LS20030U-G         | ■  | ■  | □  | ■  | ■    | □     | Flash  | 2.5m              | 3.3V | USB       | 30.0 x 30.0 x 8.0 |
| LS20031U-G         | ■  | ■  | □  | ■  | ■    | □     | Flash  | 2.5m              | 3.3V | TTL       | 30.0 x 30.0 x 8.0 |
| LS20032U-G         | ■  | ■  | □  | ■  | ■    | □     | Flash  | 2.5m              | 3.3V | RS232     | 30.0 x 30.0 x 8.0 |
| LS20030U-B         | ■  | □  | ■  | ■  | ■    | □     | Flash  | 2.5m              | 3.3V | USB       | 30.0 x 30.0 x 8.0 |
| LS20031U-B         | ■  | □  | ■  | ■  | ■    | □     | Flash  | 2.5m              | 3.3V | TTL       | 30.0 x 30.0 x 8.0 |
| LS20032U-B         | ■  | □  | ■  | ■  | ■    | □     | Flash  | 2.5m              | 3.3V | RS232     | 30.0 x 30.0 x 8.0 |



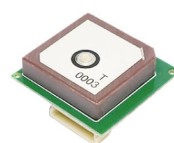
LS2003J-G



LS2003C-G



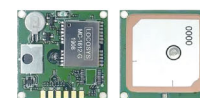
LS2003D-G



LS2003E-G



LS2003xU-G

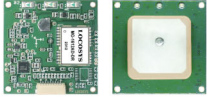


LS2003xU-B

※ ■ GPS ■ GLONASS ■ BEIDOU ■ GALILEO ■ QZSS ■ IRNSS

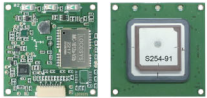


| L1 Smart Antenna | GP | GL | BD | GA | QZSS | IRNSS | Memory | Position Accuracy | VCC  | Interface | Dimension (mm)    |
|------------------|----|----|----|----|------|-------|--------|-------------------|------|-----------|-------------------|
| LC20030-52Q      |    |    |    |    |      |       | Flash  | 1.5m              | 3.3V | USB       | 38.0 x 38.0 x 7.9 |
| LC20031-52Q      |    |    |    |    |      |       | Flash  | 1.5m              | 3.3V | TTL       | 38.0 x 38.0 x 7.9 |
| LC20032-52Q      |    |    |    |    |      |       | Flash  | 1.5m              | 3.3V | RS232     | 38.0 x 38.0 x 7.9 |

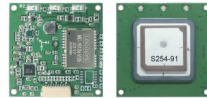


LC2003x-52Q

| L1 + L5 Smart Antenna | GP | GL | BD | GA | QZSS | IRNSS | L5 Signal | Memory | Position Accuracy | VCC  | Interface | Dimension (mm)    |
|-----------------------|----|----|----|----|------|-------|-----------|--------|-------------------|------|-----------|-------------------|
| LC20030-V2            |    |    |    |    |      |       | GPS       | Flash  | 1.5m              | 3.3V | USB       | 38.0 x 38.0 x 7.9 |
| LC20031-V2            |    |    |    |    |      |       | GPS       | Flash  | 1.5m              | 3.3V | TTL       | 38.0 x 38.0 x 7.9 |
| LC20032-V2            |    |    |    |    |      |       | GPS       | Flash  | 1.5m              | 3.3V | RS232     | 38.0 x 38.0 x 7.9 |
| LC20030-V3            |    |    |    |    |      |       | IRNSS     | Flash  | 2.5m              | 3.3V | USB       | 38.0 x 38.0 x 7.9 |
| LC20031-V3            |    |    |    |    |      |       | IRNSS     | Flash  | 2.5m              | 3.3V | TTL       | 38.0 x 38.0 x 7.9 |
| LC20032-V3            |    |    |    |    |      |       | IRNSS     | Flash  | 2.5m              | 3.3V | RS232     | 38.0 x 38.0 x 7.9 |
| LS2003H-V2            |    |    |    |    |      |       | GPS       | Flash  | 1.5m              | 3.3V | UART/USB  | 14.0 x 9.6 x 2.0  |
| LS2003H-V3            |    |    |    |    |      |       | IRNSS     | Flash  | 1.5m              | 3.3V | UART/USB  | 14.0 x 9.6 x 2.0  |



LC2003x-V2



LC2003x-V3



LS2003H-V2



LS2003H-V3

## 03 Mouse Receiver

| GPS Mouse Receiver | GP | GL | BD | GA | QZSS | IRNSS | Position Accuracy | VCC | Interface | Connector | Dimension (mm)     |
|--------------------|----|----|----|----|------|-------|-------------------|-----|-----------|-----------|--------------------|
| LS23030-2RE        |    |    |    |    |      |       | 2.5m              | 5V  | USB       | USB       | 49.0 x 41.0 x 14.1 |
| LS23032-2RE        |    |    |    |    |      |       | 2.5m              | 5V  | RS232     | PS2       | 49.0 x 41.0 x 14.1 |
| LS23036-2RE        |    |    |    |    |      |       | 2.5m              | 5V  | RS232     | RJ11      | 49.0 x 41.0 x 14.1 |
| LS23030            |    |    |    |    |      |       | 2.5m              | 5V  | USB       | USB       | 49.0 x 41.0 x 14.1 |
| LS23032            |    |    |    |    |      |       | 2.5m              | 5V  | RS232     | PS2       | 49.0 x 41.0 x 14.1 |
| LS23036            |    |    |    |    |      |       | 2.5m              | 5V  | RS232     | RJ11      | 49.0 x 41.0 x 14.1 |



LS2303x-2RE

LS2303x

※ GPS GLONASS BEIDOU GALILEO QZSS IRNSS



| GNSS Mouse Receiver | GP | GL | BD | GA | QZSS | IRNSS | Position Accuracy | VCC | Interface | Connector | Dimension (mm)     |
|---------------------|----|----|----|----|------|-------|-------------------|-----|-----------|-----------|--------------------|
| LS23030-G           |    |    |    |    |      |       | 2.5m              | 5V  | USB       | USB       | 49.0 x 41.0 x 14.1 |
| LS23032-G           |    |    |    |    |      |       | 2.5m              | 5V  | RS232     | PS2       | 49.0 x 41.0 x 14.1 |
| LS23036-G           |    |    |    |    |      |       | 2.5m              | 5V  | RS232     | RJ11      | 49.0 x 41.0 x 14.1 |

| L1 + L5 UDR Mouse Receiver | GP | GL | BD | GA | QZSS | IRNSS | Position Accuracy | VCC | Interface | Connector | Dimension (mm)     |
|----------------------------|----|----|----|----|------|-------|-------------------|-----|-----------|-----------|--------------------|
| LU23030-35AD               |    |    |    |    |      |       | 1.5m              | 5V  | USB       | USB       | 52.0 x 57.0 x 17.0 |
| LU23032-35AD               |    |    |    |    |      |       | 1.5m              | 5V  | RS232     | PS2       | 52.0 x 57.0 x 17.0 |
| LU23036-35AD               |    |    |    |    |      |       | 1.5m              | 5V  | RS232     | RJ11      | 52.0 x 57.0 x 17.0 |

| L1 Mouse Receiver | GP | GL | BD | GA | QZSS | IRNSS | Position Accuracy | VCC | Interface | Connector | Dimension (mm)     |
|-------------------|----|----|----|----|------|-------|-------------------|-----|-----------|-----------|--------------------|
| LU23030-52Q       |    |    |    |    |      |       | 1.5m              | 5V  | USB       | USB       | 52.0 x 57.0 x 17.0 |
| LU23032-52Q       |    |    |    |    |      |       | 1.5m              | 5V  | RS232     | PS2       | 52.0 x 57.0 x 17.0 |
| LU23036-52Q       |    |    |    |    |      |       | 1.5m              | 5V  | RS232     | RJ11      | 52.0 x 57.0 x 17.0 |

| L1 + L5 Mouse Receiver | GP | GL | BD | GA | QZSS | IRNSS | L5 Signal | Position Accuracy | VCC | Interface | Connector | Dimension (mm)     |
|------------------------|----|----|----|----|------|-------|-----------|-------------------|-----|-----------|-----------|--------------------|
| LU23030-V2             |    |    |    |    |      |       | GPS       | 1.5m              | 5V  | USB       | USB       | 52.0 x 57.0 x 17.0 |
| LU23032-V2             |    |    |    |    |      |       | GPS       | 1.5m              | 5V  | RS232     | PS2       | 52.0 x 57.0 x 17.0 |
| LU23036-V2             |    |    |    |    |      |       | GPS       | 1.5m              | 5V  | RS232     | RJ11      | 52.0 x 57.0 x 17.0 |
| LU23030-V3             |    |    |    |    |      |       | IRNSS     | 2.5m              | 5V  | USB       | USB       | 52.0 x 57.0 x 17.0 |
| LU23032-V3             |    |    |    |    |      |       | IRNSS     | 2.5m              | 5V  | RS232     | PS2       | 52.0 x 57.0 x 17.0 |
| LU23036-V3             |    |    |    |    |      |       | IRNSS     | 2.5m              | 5V  | RS232     | RJ11      | 52.0 x 57.0 x 17.0 |



## 04 Timing Module

| Timing Module | GP | GL | BD | GA | QZSS | IRNSS | Memory | Timing Accuracy | Position Accuracy | VCC  | Interface | Dimension (mm)    |
|---------------|----|----|----|----|------|-------|--------|-----------------|-------------------|------|-----------|-------------------|
| MC-1722-T     |    |    |    |    |      |       | Flash  | 2ns             | 1.5m              | 3.3V | UART      | 22.4 x 17.2 x 2.5 |
| ST-1612-T     |    |    |    |    |      |       | Flash  | 5ns             | 2.5m              | 3.3V | UART      | 16.0 x 12.2 x 2.2 |
| ST-1612i-GT   |    |    |    |    |      |       | Flash  | 3.9ns           | 1.8m              | 3.3V | UART      | 16.0 x 12.2 x 2.4 |
| ST-1612i-BT   |    |    |    |    |      |       | Flash  | 3.9ns           | 1.8m              | 3.3V | UART      | 16.0 x 12.2 x 2.4 |



※ GPS GLONASS BEIDOU GALILEO QZSS IRNSS



## 05 Mini PCI-E / M.2 Card

| GPS Mini PCI-e Card | GP | GL | BD | GA | QZSS | IRNSS | Memory | Position Accuracy | VCC  | Interface | Dimension (mm)     |
|---------------------|----|----|----|----|------|-------|--------|-------------------|------|-----------|--------------------|
| LS26030-2RE         |    |    |    |    |      |       | ROM    | 2.5m              | 3.3V | USB       | 50.8 x 28.5 x 3.2  |
| LS26031-2RE         |    |    |    |    |      |       | ROM    | 2.5m              | 3.3V | USB       | 26.65 x 28.5 x 3.2 |
| LS26030             |    |    |    |    |      |       | Flash  | 2.5m              | 3.3V | USB       | 50.8 x 28.5 x 3.2  |
| LS26031             |    |    |    |    |      |       | Flash  | 2.5m              | 3.3V | USB       | 26.65 x 28.5 x 3.2 |

| GNSS Mini PCI-e Card | GP | GL | BD | GA | QZSS | IRNSS | Memory | Position Accuracy                         | VCC  | Interface | Dimension (mm)     |
|----------------------|----|----|----|----|------|-------|--------|-------------------------------------------|------|-----------|--------------------|
| LS26030-G/-B         |    |    |    |    |      |       | Flash  | 2.5m                                      | 3.3V | USB       | 50.8 x 28.5 x 3.2  |
| LS26031-G/-B         |    |    |    |    |      |       | Flash  | 2.5m                                      | 3.3V | USB       | 26.65 x 28.5 x 3.2 |
| LS26030-15R          |    |    |    |    |      |       | Flash  | 0.01m+1ppm<br>< 1.5 m CEP<br>(Autonomous) | 3.3V | USB       | 50.8 x 28.5 x 3.2  |
| LS26031-15R          |    |    |    |    |      |       | Flash  | 0.01m+1ppm<br>< 1.5 m CEP<br>(Autonomous) | 3.3V | USB       | 26.65 x 28.5 x 3.2 |

| M.2 Card  | GP | GL | BD | GA | QZSS | IRNSS | Memory | Position Accuracy                         | VCC  | Interface | Dimension (mm)    |
|-----------|----|----|----|----|------|-------|--------|-------------------------------------------|------|-----------|-------------------|
| M.2-V2b   |    |    |    |    |      |       | Flash  | 1.5m                                      | 3.3V | M.2/USB   | 41.9 x 22.0 x 4.1 |
| M.2-15R   |    |    |    |    |      |       | Flash  | 0.01m+1ppm<br>< 1.5 m CEP<br>(Autonomous) | 3.3V | M.2/USB   | 41.9 x 22.0 x 4.1 |
| M.2-35AD  |    |    |    |    |      |       | Flash  | 1.5m                                      | 3.3V | M.2/USB   | 41.9 x 22.0 x 4.1 |
| M.2-R35AD |    |    |    |    |      |       | Flash  | 0.01m+1ppm<br>< 1.5 m CEP<br>(Autonomous) | 3.3V | M.2/USB   | 41.9 x 22.0 x 4.1 |



LS2603x-15R



M.2-R35AD

## 06 RTK Solution

| RTK Antenna | GP | GL | BD | GA | QZSS | IRNSS | Antenna Type          | Interface | Dimension (mm)       |
|-------------|----|----|----|----|------|-------|-----------------------|-----------|----------------------|
| LH-105AR-D  |    |    |    |    |      |       | Helix Antenna (L1+L5) | SMA       | 43.4 (D) x 42.3 (H)  |
| LH-105A2-B  |    |    |    |    |      |       | Helix Antenna (L1+L5) | SMA       | 27.5 (D) x 59.0 (H)  |
| LP-105AR-C  |    |    |    |    |      |       | Patch Antenna (L1+L5) | SMA       | 86.8 x 65.0 x 23.0   |
| LS-125-A    |    |    |    |    |      |       | Survey Antenna (L125) | SMA       | 160.0 (D) x 66.5 (H) |



LH-105AR-D



LH-105A2-B



LP-105AR-C



LS-125-A

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| RTK Module    | GP | GL | BD | GA | QZSS | IRNSS | P/R/Y | DR Function | Heading Accuracy | Position Accuracy                         | VCC  | Interface | Dimension (mm)    |
|---------------|----|----|----|----|------|-------|-------|-------------|------------------|-------------------------------------------|------|-----------|-------------------|
| RTK-1010-SB   |    |    |    |    |      |       |       |             |                  | 0.01m+1ppm<br>< 1.5 m CEP<br>(Autonomous) | 3.3V | UART      | 10.1 x 9.7 x 2.2  |
| RTK-1010      |    |    |    |    |      |       |       |             |                  | 0.01m+1ppm<br>< 1.5 m CEP<br>(Autonomous) | 3.3V | UART      | 10.1 x 9.7 x 2.2  |
| RTK-1612      |    |    |    |    |      |       | ○     |             | < 0.2°           | 0.01m+1ppm<br>< 1.5 m CEP<br>(Autonomous) | 3.3V | UART      | 16.0 x 12.2 x 2.4 |
| RTK-1612AD-DR |    |    |    |    |      |       | ○     | UDR         |                  | 0.01m+1ppm<br>< 1.5 m CEP<br>(Autonomous) | 3.3V | UART      | 16.0 x 12.2 x 2.4 |



RTK-1010-SB



RTK-1010

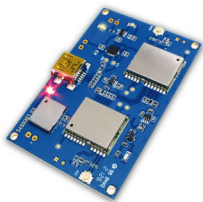


RTK-1612



RTK-1612AD-DR

| RTK Board     | GP | GL | BD | GA | QZSS | IRNSS | MEMS sensor | UBX binary for drone | Heading Accuracy | Position Accuracy                         | VCC  | Interface | Dimension (mm)     |
|---------------|----|----|----|----|------|-------|-------------|----------------------|------------------|-------------------------------------------|------|-----------|--------------------|
| RTK-4057-MHPD |    |    |    |    |      |       |             |                      | < 0.2°           | 0.01m+1ppm<br>< 1.5 m CEP<br>(Autonomous) | 3.3V | USB       | 57.0 x 40.0 x 1.0  |
| RTK-DUAL-A    |    |    |    |    |      |       |             |                      | < 0.2°           | 0.01m+1ppm<br>< 1.5 m CEP<br>(Autonomous) | 3.3V | UART      | 50.0 x 42.0 x 21.0 |
| RTK-DUAL-B    |    |    |    |    |      |       | ○           |                      | < 0.2°           | 0.01m+1ppm<br>< 1.5 m CEP<br>(Autonomous) | 3.3V | UART      | 50.0 x 42.0 x 21.0 |
| RTK-DUAL-C    |    |    |    |    |      |       |             | ○                    | < 0.2°           | 0.01m+1ppm<br>< 1.5 m CEP<br>(Autonomous) | 3.3V | UART      | 50.0 x 42.0 x 21.0 |



RTK-4057-MHPD



RTK-DUAL

| RTK System | GP | GL | BD | GA | QZSS | IRNSS | 4G LTE | Ethernet | Position Accuracy                         | VCC   | Interface | Dimension (mm)       |
|------------|----|----|----|----|------|-------|--------|----------|-------------------------------------------|-------|-----------|----------------------|
| RTK-M300   |    |    |    |    |      |       | ○      | ○        | 0.01m+1ppm<br>< 1.5 m CEP<br>(Autonomous) | 9-36V | Computer  | 185.0 x 120.0 x 42.0 |

| RTK USB Dongle | GP | GL | BD | GA | QZSS | IRNSS | P/R/Y | Operation System request | Position Accuracy                         | VCC  | Interface | Dimension (mm)      |
|----------------|----|----|----|----|------|-------|-------|--------------------------|-------------------------------------------|------|-----------|---------------------|
| RTK-15D        |    |    |    |    |      |       | ○     | Android                  | 0.01m+1ppm<br>< 1.5 m CEP<br>(Autonomous) | 3.3V | USB TypeC | 37.85 x 27.5 x 13.0 |

| RTK Receiver for drone | GP | GL | BD | GA | QZSS | IRNSS | E-COMPASS | Platform support           | Position Accuracy                         | VCC  | Interface | Dimension (mm)     |
|------------------------|----|----|----|----|------|-------|-----------|----------------------------|-------------------------------------------|------|-----------|--------------------|
| HAWK-R1                |    |    |    |    |      |       |           | Pixhawk (PX4)<br>Ardupilot | 0.01m+1ppm<br>< 1.5 m CEP<br>(Autonomous) | 3.3V | TTL       | 46.0 x 46.0 x 72.5 |
| HAWK-R2                |    |    |    |    |      |       | ○         | Pixhawk (PX4)<br>Ardupilot | 0.01m+1ppm<br>< 1.5 m CEP<br>(Autonomous) | 3.3V | TTL       | 46.0 x 46.0 x 72.5 |



RTK-M300



RTK-15D



HAWK Series

※ GPS GLONASS BEIDOU GALILEO QZSS IRNSS

※ P/R/Y : Pitch / Roll / Yaw



| RTK Receiver for drone | GP | GL | BD | GA | QZSS | IRNSS | E-COMPASS | Position Accuracy                                             | VCC | Interface | Dimension (mm)     |
|------------------------|----|----|----|----|------|-------|-----------|---------------------------------------------------------------|-----|-----------|--------------------|
| LS23231                |    |    |    |    |      |       |           | 0.01m + 1ppm CEP (Horizontal)<br>0.015m + 1ppm CEP (Vertical) | 5V  | TTL       | 41.2 x 49.2 x 45.0 |

| RTK Receiver for UDR | GP | GL | BD | GA | QZSS | IRNSS | Position Accuracy                                             | VCC | Interface | Connector | Dimension (mm)     |
|----------------------|----|----|----|----|------|-------|---------------------------------------------------------------|-----|-----------|-----------|--------------------|
| LS23236              |    |    |    |    |      |       | 0.01m + 1ppm CEP (Horizontal)<br>0.015m + 1ppm CEP (Vertical) | 5V  | TTL       | RJ11      | 41.2 x 49.2 x 45.0 |



LS2323x Series

## 07 USB Dongle

| USB Dongle | GP | GL | BD | GA | QZSS | IRNSS | Memory | Position Accuracy                   | VCC  | Interface | Dimension (mm)       |
|------------|----|----|----|----|------|-------|--------|-------------------------------------|------|-----------|----------------------|
| UB-52Q     |    |    |    |    |      |       | Flash  | 1.5m                                | 3.3V | USB       | 85.5 x 32.95 x 19.35 |
| UB-V2b     |    |    |    |    |      |       | Flash  | 1.5m                                | 3.3V | USB       | 85.5 x 32.95 x 19.35 |
| UB-15R     |    |    |    |    |      |       | Flash  | 0.01m+1ppm < 1.5 m CEP (Autonomous) | 3.3V | USB       | 85.5 x 32.95 x 19.35 |
| UB-35AD    |    |    |    |    |      |       | Flash  | 1.5m                                | 3.3V | USB       | 85.5 x 32.95 x 19.35 |
| UB-R35AD   |    |    |    |    |      |       | Flash  | 0.01m+1ppm < 1.5 m CEP (Autonomous) | 3.3V | USB       | 85.5 x 32.95 x 19.35 |



USB Dongle Series

## 08 GNSS + Dead Reckoning

| GNSS DR Module | GP | GL | BD | GA | QZSS | IRNSS | DR mode | Position Accuracy | VCC  | Interface | Dimension (mm)    |
|----------------|----|----|----|----|------|-------|---------|-------------------|------|-----------|-------------------|
| MC-1612-DG     |    |    |    |    |      |       | ADR/UDR | 2.5m              | 3.3V | UART      | 16.0 x 12.2 x 2.4 |
| MC-1612-DB     |    |    |    |    |      |       | ADR/UDR | 2.5m              | 3.3V | UART      | 16.0 x 12.2 x 2.4 |
| ST-1612i-DGX   |    |    |    |    |      |       | ADR     | 1.8m              | 3.3V | UART      | 16.0 x 12.2 x 2.3 |
| MG-1612AD-DR   |    |    |    |    |      |       | UDR     | 1.5m              | 3.3V | UART      | 16.0 x 12.2 x 2.4 |



MG-1612AD-DR



MC-1612-DG



MC-1612-DB



ST-1612i-DGX

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