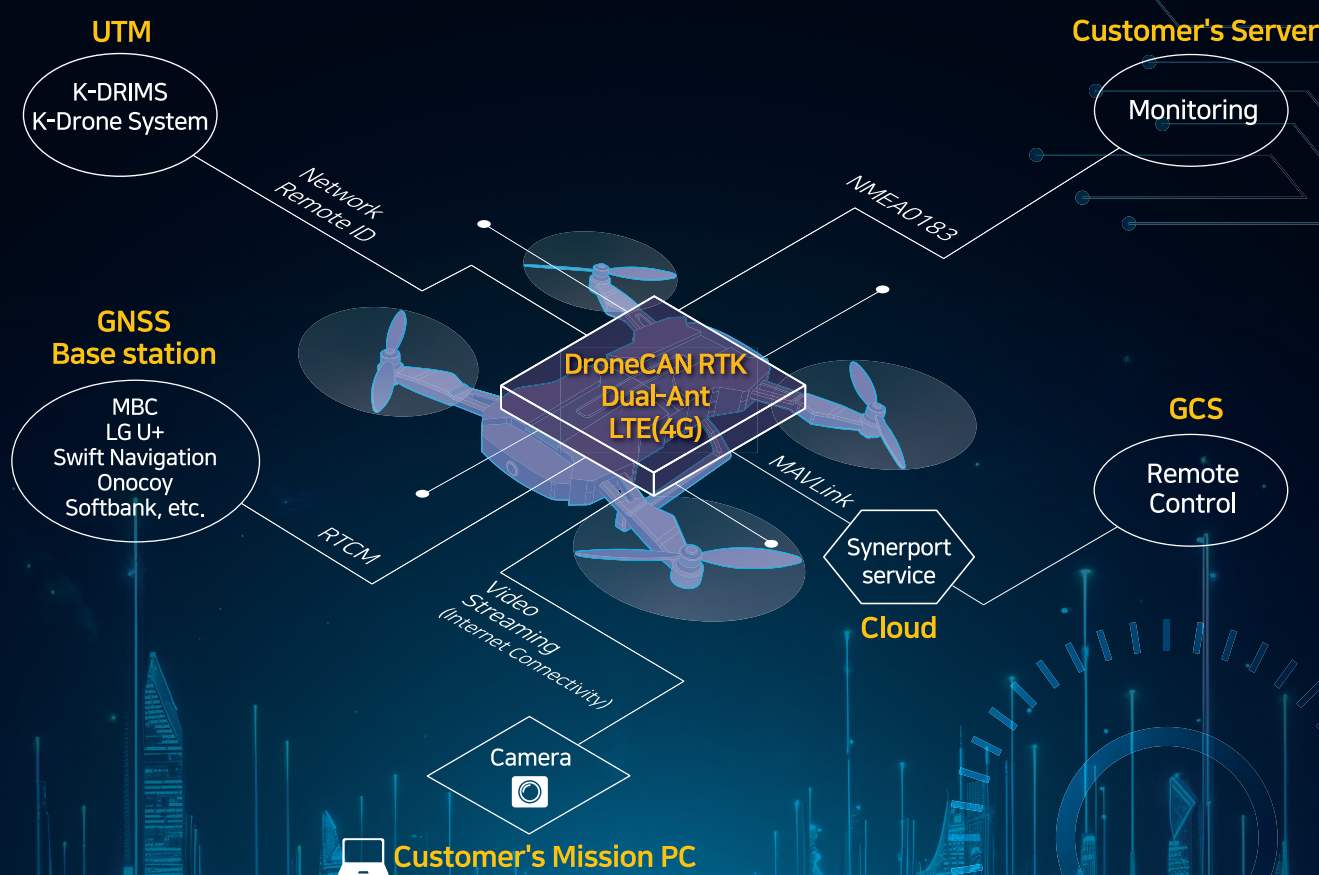


# All-In-One DroneCAN RTK receiver (SYN-3100)

*LTE(4G)、DroneCAN、Dual Antenna、  
Network Remote IDなど、全ての機能を  
統合したDroneCAN RTK 受信機*



## 主な活用分野

- 精密離着陸
- 精密ホバリング
- 精密管制
- 測量、航空撮影
- 遠隔制御
- UTM連携管制
- 目視外飛行をサポート
- ビデオ転送(インターネット共有)
- Global GNSS RTK サービス企業との連携をサポート (Onocoy, Swift Navigation, Softbank, etc.)



▲ SYN-3100  
Dual Antennas version

# SYN-3100

- Precision takeoff and landing
- Pile hovering
- Precision Monitoring
- Survey, aerial photography
- Remote Control
- Connection support with UTM
- BVLOS flight support
- Video Streaming (Internet Connectivity)
- Connection support with Global GNSS RTK service providers (Onocoy, Swift Navigation, Softbank, etc.)



Dual Antennas version

| UM982 Specifications    |                                                                                                                                                             |
|-------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Channel                 | 1408 channels                                                                                                                                               |
| Frequency               | GPS (L1C/A, L2C, L2P(Y), L5)<br>BDS (B1I, B2I, B3I, B1C, B2b)<br>GLONASS(G1, G2)<br>Galileo (E1, E5a, E5b, E6)<br>QZSS (L1C/A, L2C, L5, L6)<br>SBAS (L1C/A) |
| Data Format             | NMEA 0183                                                                                                                                                   |
| Cold Start              | <30s                                                                                                                                                        |
| RTK (RMS)               | Horizontal: 0.8cm+1ppm<br>Vertical: 1.5cm+1ppm                                                                                                              |
| Heading Accuracy        | 0.1°/1 m baseline                                                                                                                                           |
| Time Accuracy           | 20 ns                                                                                                                                                       |
| Velocity Accuracy (RMS) | 0.03 m/s                                                                                                                                                    |
| Data Update Rate        | Dual antenna 20 Hz (RTK + Heading)                                                                                                                          |

| Power monitoring Sensor_ INA237 Specifications |                                  |
|------------------------------------------------|----------------------------------|
| Offset voltage                                 | ±50 $\mu$ V                      |
| Gain error                                     | ±0.3%                            |
| Power monitoring accuracy                      | 1.6% full scale, -40°C to +125°C |
| Operational current                            | 640 $\mu$ A (typical)            |

| IMU Sensor_ ICM-42688 Specifications        |                                         |
|---------------------------------------------|-----------------------------------------|
| Supply voltage VDDID                        | 1.71V~3.6V                              |
| Supply voltage VDD                          | 1.71V~3.6V                              |
| Gyroscope Noise                             | 2.8 mdps/ $\sqrt$ Hz                    |
| Accelerometer Noise                         | 70 $\mu$ g/ $\sqrt$ Hz                  |
| User selectable Gyro Full-scale range (dps) | ± 15.6/31.2/62.5/125/250/500/1000 /2000 |

| PHYSICAL              |                   |
|-----------------------|-------------------|
| Dimension             | 66 x 68 x 12.8 mm |
| Weight                | 77g               |
| Operating Temperature | -20° C to +60° C  |
| Storage Temperature   | -40° C to +85° C  |

| Electrical Specifications |              |
|---------------------------|--------------|
| Operating Voltage Range   | +9 ~ 60 V DC |
| Power Consumption         | 2W           |

| Geomagnetic Sensor_BMM350 Specifications |                                     |
|------------------------------------------|-------------------------------------|
| Supply voltage VDDID                     | 1.72 ~ 3.6 V                        |
| Supply voltage VDD                       | 1.72 ~ 1.98V                        |
| Average typical current consumption      | 200 $\mu$ A @ 100 Hz in normal mode |
| Magnetic field range (all axes)          | ±2000 $\mu$ T                       |
| Maximum sampling rate                    | 400 Hz                              |

| Barometer/Thermometer Sensor_ BMP390 Specifications  |                          |
|------------------------------------------------------|--------------------------|
| Operating range (full accuracy)                      | Pressure : 300 ~ 1250hPa |
| Supply voltage VDDID                                 | 1.2V ~ 3.6V              |
| Supply voltage VDD                                   | 1.65V ~ 3.6V             |
| Average typical current consumption (1 Hz data rate) | 3.2 $\mu$ A at 1 Hz      |
| Temperature coefficient offset (25°C~40°C at 900Pa)  | ±0.6Pa/K                 |
| Maximum sampling rate                                | 200 Hz                   |

| LTE module_EG25-G Mini PCIe Specifications |                                                                                                                              |
|--------------------------------------------|------------------------------------------------------------------------------------------------------------------------------|
| Frequency bands (MHZ)-G                    | LTEFDD : B1/2/3/4/5/7/8/12/13/18/<br>19/20/25/26/28;<br>LTETDD : B38/39/40/41;<br>WCDMA : B1/2/4/5/6/8/19;<br>GSM : B2/3/5/8 |
| LTE data rates (Mbps)                      | LTE-FDD: Max. 150 (DL)/Max. 50 (UL);<br>LTE-TDD: Max. 130 (DL)/Max. 30 (UL)                                                  |
| Supply voltage range                       | 3.0 V ~ 3.6 V, typ. 3.3 V                                                                                                    |

| INTERFACE              |                                                                          |
|------------------------|--------------------------------------------------------------------------|
| Connection Port        | UART 1/2, I2C, CAN<br>Serial (for MAVLink)<br>GPS I/O (micro USB), USB-C |
| Correction Data format | RTCM v3.x(RTK)                                                           |
| Indicator              | r.P.N.R, RTCM, RTK, POWER                                                |

## Contact



【輸入販売元／総代理店】

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