**Hornet Modules )LEVEL 2) integrated antenna**

The Hornet GPS/GNSS series features an integrated antenna that minimizes design resources and risks associated with antenna and GPS receiver integration, improving time-to-market, while maintaining the world’s smallest size and unmatched sensitivity.

**Main Benefits**

* World’s smallest footprint
* Integrated antenna
* Dramatically cuts design resources
* Power-efficient
* Ultrasensitive

**Hornet Series**

**Hornet ORG1410** World’s smallest GPS-only antenna module for cost-sensitive applications.

**Hornet ORG1411** World’s lowest-profile patch-antenna module enabling small product form factors.

**Hornet ORG1415** Fully integrated GPS receiver with increased noise immunity.

**Hornet ORG1418** GPS receiver with larger patch antenna for maximum performance.

**Hornet ORG1510** World’s smallest multi-constellation antenna module enabling high-performance in multiple applications.

**Hornet ORG1518** GNSS module with larger patch antenna for high-performance in lowest signal-level environments.

**Hornet ORG4502** GNSS module interfaced via ZIF connector. Ideal for applications where GPS/GNSS is an option.

**Product Model Selector**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Model** | **Ordering Code** | **Dimensions** | **Weight** | **Constellation** | **Internal Memory** | **DC Supply** | **I/O Voltage Level** | **GNSS SOC** |
| **Hornet ORG1410** | ORG1410-PM01 | 10x10 mm | 2.34 gr | GPS | ROM | 1.8V | 1.8V | SiRFstar IV B01 |
| ORG1410-PM04 | 10x10 mm | 2.34 gr | GPS | ROM | 2-5.5V | 1.8V | SiRFstar IV B01 |
| **Hornet ORG1411-PM01** | ORG1411-PM01 | 10x10 mm | 1.35 gr | GPS | ROM | 1.8V | 1.8V | SiRFstar IV B01 |
| ORG1411-PM04 | 10x10 mm | 1.35 gr | GPS | ROM | 2-5.5V | 1.8V | SiRFstar IV B01 |
| **Hornet ORG1415** | ORG1415 | 17x17 mm | 3.73 gr | GPS | ROM | 2-6V | 1.8-3.6V | SiRFstar IV B01 |
| **Hornet ORG1418** | ORG1418 | 17x17 mm | 4.38 gr | GPS | ROM | 2-6V | 1.8-3.6V | SiRFstar IV B01 |
| **Hornet ORG1510** | ORG1510-R01 | 10x10 mm | 2.37 gr | GPS+GLONASS | ROM | 1.8V | 1.8V | SiRFstar V B01 |
| ORG1510-R02 | 10x10 mm | 2.37 gr | GPS+GLONASS/BeiDou/Galileo | Flash | 1.8V | 1.8V | SiRFstar V B02 |
| ORG1510-MK04 | 10x10 mm | 2.4 gr | GPS+GLONASS/BeiDou/Galileo | Flash | 3.3V | 3.3V | MTK3333 |
| **Hornet ORG1518** | ORG1518-R01  | 18x18 mm | 8 gr | GPS+GLONASS | ROM | 1.8V | 1.8V | SiRFstar V B01 |
| ORG1518-R02 | 18.5x28.5 mm | 8 gr | GPS+GLONASS/BeiDou/Galileo | Flash | 1.8V | 1.8V | SiRFstar V B02 |
| **Hornet ORG4502** | ORG4502 | 10X10 mm | 7.83 gr | GPS+GLONASS | ROM | 1.8V | 1.8V | SiRFstar V B01 |

**Hornet - ORG1410

World’s smallest GPS-only antenna module for cost-sensitive applications.
תמונת מוצר, סלוגן שיווקי מדוייק למוצר, תמונת אפליקציות**

**Highlights**

* World’s smallest footprint
* Integrated antenna
* Dramatically cuts design resources
* Power-efficient
* Ultrasensitive

**Product Variants**

|  |  |
| --- | --- |
| Hornet ORG1410-PM01 | World’s smallest GPS receiver with integrated patch antenna. |
| Hornet ORG1410-PM04 | Version with integrated LDO for wide operating voltage range. |

**Variant Selector**

|  |  |  |
| --- | --- | --- |
| **Ordering Code** | **ORG1410-PM01** | **ORG1410-PM04** |
| Constellation | GPS | GPS |
| Internal Memory | ROM | ROM |
| GNSS SOC | SiRFstar IV B01 | SiRFstar IV B01 |
| DC Supply | 1.8 V | 2-5.5 V |

**Product Information**

Datasheet – Hornet ORG1410

1. להניע לרכישה
2. לאפשר ליצור קשר אודות המוצר – למידע נוסף והבהרות
3. להעביר לעמוד מפיצים

**Hornet ORG1411
World’s lowest profile patch-antenna module enabling small product form.**

**Highlights**

* World’s smallest footprint
* Integrated antenna
* Dramatically cuts design resources
* Power-efficient
* Ultrasensitive

**Product Variants**

|  |  |
| --- | --- |
| Hornet ORG1411-PM01 | Lowest profile GPS receiver with patch antenna. |
| Hornet ORG1411-PM04 | Version with integrated LDO for wide operating voltage range. |

**Variant Selector**

|  |  |  |
| --- | --- | --- |
| **Ordering Code** | **ORG1411-PM01** | **ORG1411-PM04** |
| Constellation | GPS | GPS |
| Internal Memory | ROM | ROM |
| GNSS SOC | SiRFstar IV B01 | SiRFstar IV B01 |
| DC Supply | 1.8 V | 2-5.5 V |

**Product Information**

Datasheet – Hornet ORG1411

**Hornet Module - ORG1415
Fully integrated GPS receiver with increased noise immunity.**

**Highlights**

* World’s smallest footprint
* Integrated antenna
* Dramatically cuts design resources
* Power-efficient
* Ultrasensitive

|  |  |
| --- | --- |
| **Ordering Code** | **ORG1415** |
| Constellation | GPS |
| Internal Memory | ROM |
| GNSS SOC | SiRFstar IV B01 |

**Product Information**

Datasheet – Hornet ORG1415

**Hornet Module - ORG1418
GPS receiver with larger patch antenna for maximum performance.**

**Highlights**

* World’s smallest footprint
* Integrated antenna
* Dramatically cuts design resources
* Power-efficient
* Ultrasensitive

|  |  |
| --- | --- |
| **Ordering Code** | **ORG1418** |
| Constellation | GPS |
| Internal Memory | ROM |
| GNSS SOC | SiRFstar V B01 |

**Product Information**

Datasheet – Hornet ORG1418

**Hornet Series - ORG1510
World’s smallest multi-constellation antenna module enabling high-performance in a variety of applications.**

**Highlights**

* World’s smallest footprint
* Integrated antenna
* Dramatically cuts design resources
* Power-efficient
* Ultrasensitive

**Product Variants**

|  |  |
| --- | --- |
| Hornet ORG1510-R01 | ROM-based module supporting GPS+GLONASS in a 10x10 mm footprint.  |
| Hornet ORG1510-R02 | Integrated flash version to ease implementing advanced features. |
| Hornet ORG1510-MK04 | Multi-constellation module supporting 10 Hz update rates. |

**Variant Selector**

|  |  |  |  |
| --- | --- | --- | --- |
| **Ordering Code** | **ORG1510-R01** | **ORG1510-R02** | **ORG1510-MK04** |
| Constellation | GPS+GLONASS | GPS+GLONASS/BeiDou/Galileo | GPS+GLONASS/BeiDou/Galileo |
| Internal Memory | ROM | Flash | Flash |
| GNSS SOC | SiRFstar V B01 | SiRFstar V B02 | MTK3333 |

**Product Information**

Datasheet – Hornet ORG1510

**Hornet Series - ORG1518
GNSS module with larger patch antenna for high-performance in the lowest signal-level environments.**

**Highlights**

* World’s smallest footprint
* Integrated antenna
* Dramatically cuts design resources
* Power-efficient
* Ultrasensitive

**Product Variants**

|  |  |
| --- | --- |
| Hornet ORG1518-R01 | GPS+GLONASS receiver with larger patch antenna for maximum performance |
| Hornet ORG1518-R02 | Flash-based version to ease implementing advanced features. |

**Product Variants**

|  |  |
| --- | --- |
| Hornet ORG1518-R01 | Best performing place-and-play GNSS module on the market. |
| Hornet ORG1518-R02 | Flash-based version to ease implementing advanced features. |

**Product Selector**

|  |  |  |
| --- | --- | --- |
| **Ordering Code** | **ORG1518-R01** | **ORG1518-R02** |
| Constellation | GPS+GLONASS | GPS+GLONASS/BeiDou/Galileo |
| Internal Memory | ROM | Flash |
| GNSS SOC | SiRFstar V B01 | SiRFstar V B02 |

**Product Information**

Datasheet – Hornet ORG1518

**Hornet Series – ORG4502
GNSS module interfaced via ZIF connector. Ideal for applications where GPS/GNSS is an option.**

**Highlights**

* World’s smallest footprint
* Integrated antenna
* Dramatically cuts design resources
* Power-efficient
* Ultrasensitive

|  |  |
| --- | --- |
| **Ordering Code** | **ORG4502** |
| Constellation | GPS+GLONASS |
| Internal Memory | ROM |
| GNSS SOC | SiRFstar V B01 |

**Product Information**

Datasheet – Hornet ORG4502

**Spider Modules ( LEVEL 2)**

The Spider GPS/GNSS series’ small size provides the designer exceptional flexibility, substantial reductions in product size, and no-compromise performance. It resolves the industry's acute pain points of lack of accuracy and unreliability, and helps your customers remain competitive.

**Main Benefits**

* World’s smallest footprint
* Maximizes designer freedom
* Minimizes product size
* Power-efficient
* Ultrasensitive

 **Spider Series**

**Spider ORG4033 World’s smallest multi-constellation module supporting 10 Hz update rates.**

**Spider ORG4400 World’s smallest GPS module at only 4.1x4.1 mm.**

**Spider ORG4472 Fully-integrated GPS receiver for broad-market applications.**

**Spider ORG4475 Fully-integrated GPS receiver in a compact form factor.**

**Spider ORG4500 World’s smallest multi-constellation module at only 4.1x4.1 mm.**

**Spider ORG4572 GNSS module with xxx for xxx.**

**Product Selector**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Product** | Ordering Code | Dimensions | Weight | Constellation | Internal Memory | DC Supply | I/O Voltage Level | GNSS SOC |
| **Spider ORG4033** | ORG4033-MK05 | 5.6x5.6 mm | 0.13 gr | GPS+GLONASS/BeiDou | Flash | 3.3 | 3.3 | MTK3333 |
| **Spider ORG4400** | ORG4400 | 4.1x4.1 mm | 0.1 gr | GPS | ROM | 1.8 | 1.8 | SiRFstar IV B01 |
| **Spider ORG4472** | ORG4472-PM04 | 7X7 mm | 0.2 gr | GPS | ROM | 1.8 | 1.8 | SiRFstar IV B01 |
| **Spider ORG4475** | ORG4475-PM04 | 5.6x5.6 mm | 0.1 gr | GPS | ROM | 1.8 | 1.8 | SiRFstar IV B01 |
| **Spider ORG4500** | ORG4500 | 4.1x4.1 mm | 0.1 gr | GPS+GLONASS | ROM | 1.8 | 1.8 | SiRFstar V B01 |
| **Spider ORG4572** | ORG4572-R01 | 7x7 mm | 0.2 gr | GPS+GLONASS | ROM | 1.8 | 1.8 | SiRFstar V B01 |
| ORG4572-R02 | 7x7 mm | 0.2 gr | GPS+GLONASS/BeiDou/Galileo | ROM | 1.8 | 1.8 | SiRFstar V B02 |

**Spider Series – ORG4033
World’s smallest multi-constellation module supporting 10 Hz update rates.**

**Highlights**

* World’s smallest footprint
* Maximizes designer freedom
* Minimizes product size
* Power-efficient
* Ultrasensitive

**Product Selector**

|  |  |
| --- | --- |
| **Ordering Code** | **ORG4033-MK05** |
| Constellation | GPS+GLONASS/BeiDou |
| Internal Memory | Flash |
| GNSS SOC | MTK3333 |

**Product Information**

Datasheet – Spider ORG4033

**Spider Series – ORG4400
World’s smallest GPS module at only 4.1x4.1 mm.**

**Highlights**

* World’s smallest footprint
* Maximizes designer freedom
* Minimizes product size
* Power-efficient
* Ultrasensitive

**Product Selector**

|  |  |
| --- | --- |
| **Ordering Code** | **ORG4400** |
| Constellation | GPS |
| Internal Memory | ROM |
| GNSS SOC | SiRFstar IV B01 |

**Product Information**

Datasheet – Spider ORG4400

**Spider Series – ORG4472
Fully-integrated GPS receiver for broad-market applications.**

**Highlights**

* World’s smallest footprint
* Maximizes designer freedom
* Minimizes product size
* Power-efficient
* Ultrasensitive

**Product Selector**

|  |  |
| --- | --- |
| **Ordering Code** | **ORG4472-PM04** |
| Constellation | GPS |
| Internal Memory | ROM |
| GNSS SOC | SiRFstar IV B01 |

**Product Information**

Datasheet – Spider ORG4472

**Spider Series – ORG4475
Fully-integrated GPS receiver in a compact form factor.**

**Highlights**

* World’s smallest footprint
* Maximizes designer freedom
* Minimizes product size
* Power-efficient
* Ultrasensitive

**Product Selector**

|  |  |
| --- | --- |
| **Ordering Code** | **ORG4475-PM04** |
| Constellation | GPS |
| Internal Memory | ROM |
| GNSS SOC | SiRFstar IV B01 |

**Product Information**

Datasheet – Spider ORG4475

**Spider Series – ORG4500
World’s smallest multi-constellation module at only 4.1x4.1 mm.**

**Highlights**

* World’s smallest footprint
* Maximizes designer freedom
* Minimizes product size
* Power-efficient
* Ultrasensitive

**Product Selector**

|  |  |
| --- | --- |
| **Ordering Code** | **ORG4500** |
| Constellation | GPS+GLONASS |
| Internal Memory | ROM |
| GNSS SOC | SiRFstar V B01 |

**Product Information**

Datasheet – Spider ORG4500

**Spider Series – ORG4572
GNSS module with xxx for xxx.**

**Highlights**

* World’s smallest footprint
* Maximizes designer freedom
* Minimizes product size
* Power-efficient
* Ultrasensitive

**Product Variants**

|  |  |
| --- | --- |
| Spider ORG4572-R01 | GPS+GLONASS receiver for low-power applications. |
| Spider ORG4572-R02 | Flash-based version to ease implementing advanced features. |

**Product Variant Selector**

|  |  |  |
| --- | --- | --- |
| **Ordering Code** | **ORG4572-R01** | **ORG4572-R02** |
| Constellation | GPS+GLONASS | GPS+GLONASS/BeiDou/Galileo |
| Internal Memory | ROM | ROM |
| GNSS SOC | SiRFstar V B01 | CSRG0530B02-ICKD-R |

**Product Information**

Datasheet – Spider ORG4572