

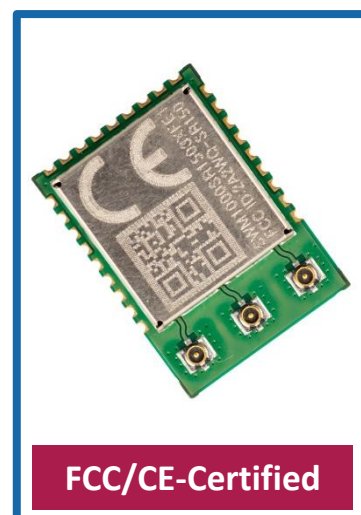
Sunway SW-M1000-SR150

- A FiRa and IEEE 802.15.4z UWB compliant wireless transceiver module based on NXP's SR150 SoC
- Allows the location of objects in Real Time Location Systems (RTLS) to a secure range precision of 10 cm and an angle precision of 3 degrees
- Integration of SR150 SoC, antenna interface, power management and clock control simplifies design integration – minimal RF design required
- Secure cryptographic hardware accelerators for data encryption and generation of the STS

Target Applications

Precision real time location systems (RTLS) using two-way ranging (TWR), TDOA or PDOA schemes in a variety of applications such as:

- Industrial
- Healthcare
- Smart Home
- Smart Retail RTLS
- Secure Hands-free Payment
- Automotive Access



SW-M1000-SR150

Accuracy ± 10 cm, ± 3 deg.
3D AoA capable
Channels 5,6,8,9
13 x 18 x 2.2 mm
Multi-antenna options

Items	Specifications
Main Chip	NXP Trimension SR150
UWB Channels	CH 5 & CH 9
Frequency Range	6.24 GHz - 8.24 GHz
Max Output Power	11.5 dBm
Ranging Mode	1D/2D/3D Ranging
Antenna Connector Type	JSC
Communication Interface	SPI
Supply Voltage	2.2 V - 5.5 V (with DC-DC)
	1.71 V - 1.98 V (without DC-DC)

Sunway is a proud member of the UWB association FiRa.



Sunway Modules are Based on NXP's Trimension™ SR040 and SR150

- Sunway UWB modules integrate clock circuit, RF circuit and power management that conform to the IEEE 802.15.4z HRP UWB standard
- PHY and MAC conform to the FiRa Consortium specification
- Integrated Time-of-Flight (ToF), Time-Difference of Arrival (TDoA), Angle-of-Arrival (AoA)
- High Precision RTLS, Real-Time Location System (TDOA and AoA)

