

ER220-III L GNSS Precision Timing Module



Product Introduction:

BDS / GPS dual mode timing module for power telecom timing applications

The low-power GNSS SoC chip, which is fully independent intellectual property rights, is a fully-built BDS / GPS timing module on the market. With timing accuracy, high reliability and reliability, it is suitable for satellite scale application.

Product advantages:

Precision timing, 1PPS accuracy is better than 20ns

Support single-star timing mode, even if only one visible satellite can maintain a reliable timing

Supports timing data protocol, instruction control

Compact design, small size

Compatible with mainstream GPS timing modules to save replacement costs

SMD surface mount package for easy production

Technical indicators:

Performance:

Channel based on 64 channels Humbird™ chip sensitivity BDS GPS

Frequency BDS B1 Tracking -160dBm -160dBm

GPS L1 capture -145dBm -147dBm

Positioning mode Single system independent positioning Positioning accuracy 1 2.5m CEP (dual system level)

Multi - system joint positioning

2.0m CEP (SBAS level) *

First time (TTFF) Cold start: 30s Speed accuracy 1 (RMS) GNSS / GPS: 0.1m / s

Hot start: 1s

BDS: 0.2 m / s

Re-capture: <1s 1PPS 20ns

Data update rate 1Hz

Physical characteristics:

Size 17 × 22.4 × 2.4mm

Package 28 pin, SMD surface mount

Operating temperature -40 ° C to + 85 ° C

Storage temperature -45 ° C to + 90 ° C

Electrical indicators:

Voltage 2.7V ~ 3.6V DC

LNA feeds 2.7V to 3.3V, <100mA

Power consumption 2 120mW

Function interface:

Data interface

1 x UART

1 x 1PPS output

Data Interface NMEA 0183 (compatible with Big Dipper)

Unicore

Functional characteristics:

Active antenna, passive antenna, single-star timing mode

Note: Note * part of the optional configuration 1 typical, <30m / s open sky 2open sky, continuous tracking

Application areas:

Telecom base station timing, power timing, LAN time synchronization

