

# G80D

## Production Specification

Version 1.0 Date 2022.12

### **Description**

This document refers to **the G20D product specifications**.

**Intended Audience** This document is intended for system engineers, development engineers, and test engineers.

This design guide provides support for the customer's product design. The customer must design and debug the product in accordance with the specifications and parameters in this document. The company shall not be liable for personal injury and property loss caused by improper operation of customers.

The content of this document may be updated without prior notice due to product version upgrade or other reasons.

Unless otherwise agreed, all statements, information and recommendations in this document do not constitute a warranty of any kind, express or implied.

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## About this document

### Range

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### Reversion records

version	date	Alteration	version
1.0	2022-01	initial version	V1.0.0

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### Symbol Stipulations

Symbol	definition
	Danger or Warning Indicates the rules that you must comply with. Otherwise, irreversible damage to the module or the customer's equipment may be caused, and personal injury may even occur.
	Note, warning users should pay special attention to the use of the module, if not comply, the module or customer equipment may fail.
	Notes or tips provide suggestions or suggestions for the use of the module.

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# 1 Product Presentation

## 1.1 Product name

Name: G20D Wireless charging model

Model: G20D

product standard:

## 1.2 Product appearance drawing



## 1.3 Basic equipment parameter

### 1.3.1 Tractor Parameter

Product parameter	description
hardware platform	MTK6261+AT6558R
Whole machine size	
battery capacity	lithium battery: 3.7V/8000mAh
locate mode	GPS/BDS/GLONASS & LBS
Position error	The GPS positioning error is less than 10m (the actual positioning error is related to the environment and weather of the area where the vehicle is located). Base station positioning error depends on the current base station coverage information.
GSM antenna	Shrapnel antenna
GPS antenna	Built in 18mm*18mm*4mm ceramic antenna
light sensation	Support
WIFI	Not support
shock sensor	support
microphone	support
SMS	support
power switch	BUILT-IN KEY AND MOUSE BINDINGS
Battery install	Welding rechargeable battery
communication network	GPRS
communication mode	TCP
waterproof and dustproof	IP65
operating temperature	-30°C~ +80°C
storage temperature	-35°C~ +80°C the best (0°C~ +30°C)

### 1.3.2 Network performance

<b>Support mode</b>	GPRS
<b>Frequency</b>	850/1900/900/1800MHZ

### 1.3.3 GPS Performance

<b>Position style</b>	GPS/BDS/GLONASS
<b>signal reception</b>	support GPS/BDS/GLONASS Parallel receiving and joint positioning
<b>Cold start TTF</b>	$\leq 32S$
<b>Hot start TTF</b>	$\leq 1S$
<b>recapture TTF</b>	$\leq 1S$
<b>Cold start capture sensitivity</b>	-145 dBm
<b>Hot start capture sensitivity</b>	-156 dBm
<b>Recapture sensitivity</b>	-160 dBm
<b>tracking</b>	-162dBm

<b>sensitivity</b>	
<b>positional accuracy</b>	$\leq 10\text{M}$
<b>rate accuracy</b>	$< 0.1\text{m/s}$
<b>Timing accuracy</b>	$< 30\text{ns}$
<b>Position update rate</b>	maximum 5Hz
<b>AGPS</b>	Support

## 2 Function description

### 2.1 Indicator description

Red LED(Power/working state)	Status definition
slow flashing	Normal operation of equipment
Constant lighting	charging
No lighting	The device is faulty or hibernated

Yellow LED(Network communication signal light)	Status definition
Quick flashing	network initialization
Slow flashing	The network receives signals normally
No lighting	No network signal or sleep

Blue LED(GPS signal status)	Status definition
Quick flashing	GPS signal search underway
Slow flashing	GPS has located
No lighting	No GPS signal or sleep

### 2.2 Functional description

function details	Function description
Intelligent power saving mode	In this mode, a heartbeat packet is uploaded every five minutes, and a GPS location packet is uploaded every 10 seconds and 100 meters during exercise. After three minutes of rest, the GPS goes into hibernation state
	If the value is set to 10 minutes, a heartbeat packet is uploaded every 5

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Interval Mode	minutes, and a GPS location packet is uploaded every 10 minutes regardless of movement or static
Once-a-day model	That is, within 24 hours, the device will only get up and work once at the specified time, and enter the hibernation state at the rest time (the device that does not upload heartbeat packets is in the shutdown state).
Disassembly alarm	When detecting light sense from dark to bright, disassembly alarm is realized.

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