IronOne

取扱説明書

Rev. A1-2



株式会社 hemitech

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6111549	6876920	7400956	8000381
6397147	7142956	7429952	8018376
6469663	7162348	7437230	8085196
6501346	7277792	7460942	8102325
6539303	7292185	7689354	8138970
6549091	7292186	7808428	8140223
6711501	7373231	7835832	8174437
6744404	7388539	7885745	8184050
6865465	7400294	7948769	8190337
8214111	8217833	8265826	8271194
8307535	8311696	8334804	RE41358

Australia Patents	
2002244539	2002325645
2004320401	

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1. はじめに

製品の概要

製品の特長

前面の構成

1.1 製品の概要

IronOne は厳しい環境向けに設計された頑丈なコンピュータです。見やすいディスプレイ、強力な入出力、多様なアプリケーションに対応する柔軟性などを要求するマシンコントロールに最適です。IronOne はタッチ操作可能な 8 インチ LCD ディスプレイを備えています。

IP67 のケースはマシンコントロールを含む厳しい環境で使用できるように設計されました。 1280 x 720 の解像度を持つ見やすいディスプレイを備えています。

Intel のデュアルコアプロセッサを用いて複雑なフォーマットで大きいサイズのファイルを扱うことができます。

32GB フラッシュメモリを持ち、128GB までの microSD カードで拡張することができます。

1.2 製品の特長

IronOneは以下のような特長があります。

- ・Windows 10 オペレーティングシステム
- ・Bluetoothとイーサネット対応
- ・セルラーモデムによるネット接続
- · IP67

1.3 前面の構成



図 1 IronOne の構成

IronOneの前面の構成は以下の通りです。

名称	部品番号
P1	N/A
P2	N/A
電源ボタン	3秒長押しで電源On
ディスプレイ	タッチスクリーン



2. 機材の設置

ピン配置

SIM カード

電源 On/Off

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2.1 ピン配置

IronOne のピン配置を以下に示します。



図 2-1 ピン配置 表 2-1 COMM ピン出力内容

Comm 12 ピン	名称	内容
1	CAN H	COM1 in Win10 device manager
2	RS232 TX 1	COM2 in Win10 device manager
3	RS232 RX 1	
4	GPIO	
5	GND	Signal ground
6	RS422 TX 1	COM4 in Win10 device manager
		RS232/RS422/RS485 can Switch on BIOS setup:
		BIOS setup->Advanced->F81216SEC Super Io
		Configuration->Serial Port 4 Configuration
7	RS422 TX 2	
8	RS422 RX 1	
9	RS422 RX 2	
10	GND	Power ground
11	V12+ OUT	Power out for serial device
12	CAN L	COM1 in Win10 device manager

表 2-2 Video ピン出力内容

Video 12 ピン	名称
1	V12+ OUT
2	GND
3	CAN2 L_IN
4	CAN2 H_IN
5	NET 1TX+_IN
6	NET 1TXIN
7	NET 1RXIN
8	NET 1RX+_IN
9	GPIO2_IN
10	GND
11	VIDEO2_IN
12	VIDEO1_IN

表 2-3 通信

Comm DT15-12PA
CAN x 1
UART (RS232 x 1)
RS422/RS485/RS232 x 1 (Software switch)
GPIO x 1 (Default input pullup 5V)
12V/0.75A Power output

表 2-4 Power コネクタ

Power	
1	PWR+
2	PWR-
3	ACC
4	NC
5	PWR-
6	PWR+

表 2-5 Video 通信

Video DT15-12PB
CAN x 1
CVBS video input x 2
10M/100M LAN x 1
GPIO x 1 (Default input pullup 5V)
12V/0.75A Power output

2.2 SIMカード

SIM カード取付け用のパネルは T10 トルクスドライバーで開けることができます。標準サイズの SIM カードを取り付けてください。取付終わったら T10 トルクスドライバーでしっかりと閉じてください。モバイル接続については 3.2 モバイル接続設定を参照ください。

2.3 電源On/Off

電源On

電源ボタン押します。押す時間は10秒以内にします。

電源Off

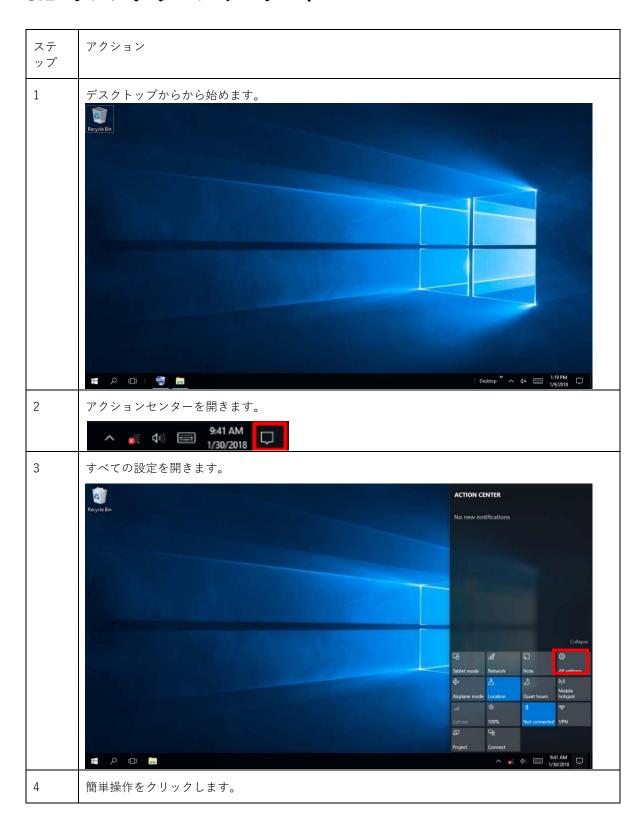
3秒長押しします。



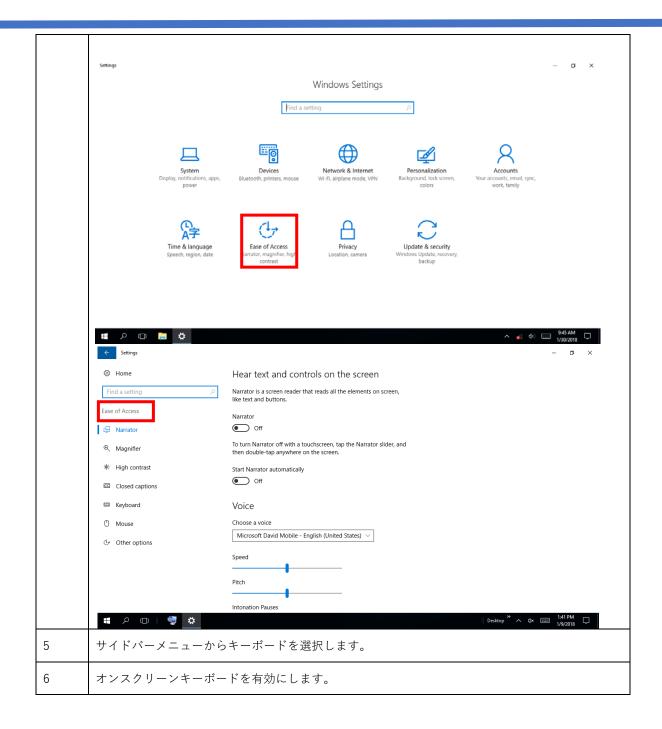
3. IronOneの操作

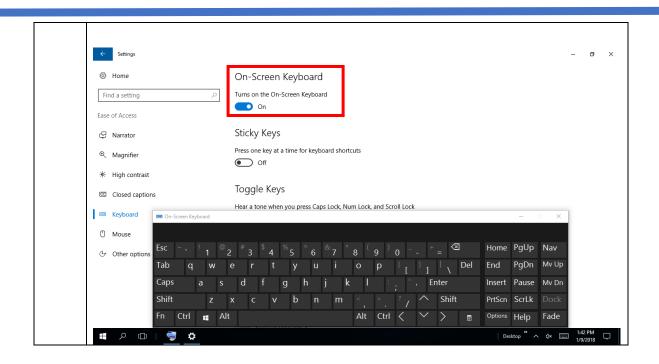
オンスクリーンキーボード モバイル接続 Bluetooth 接続 Wi-Fi 接続

3.1 オンスクリーンキーボード



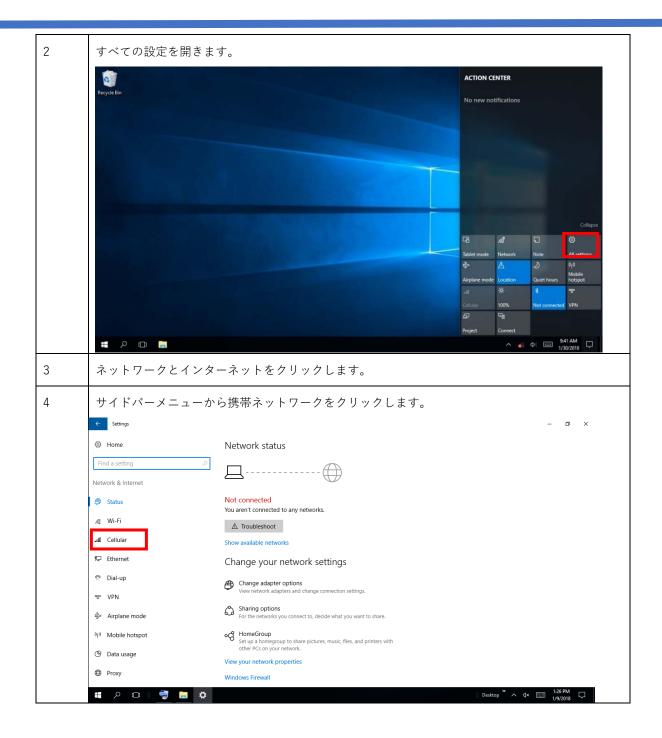
hemitech

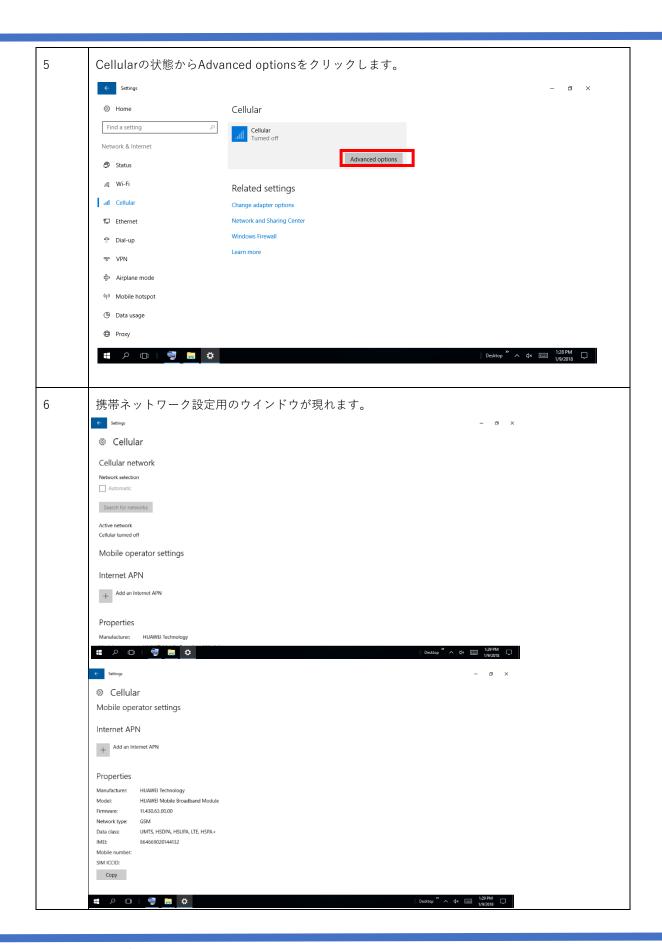




3.2 モバイル接続

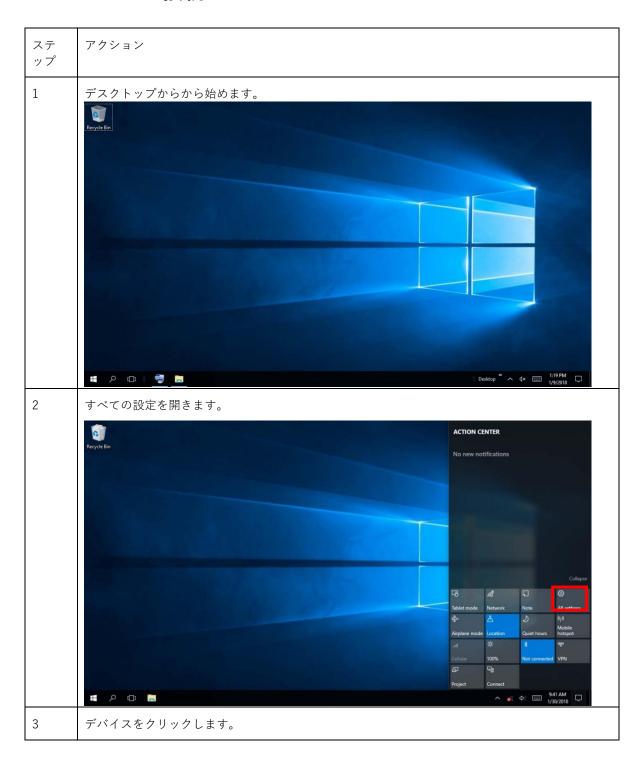




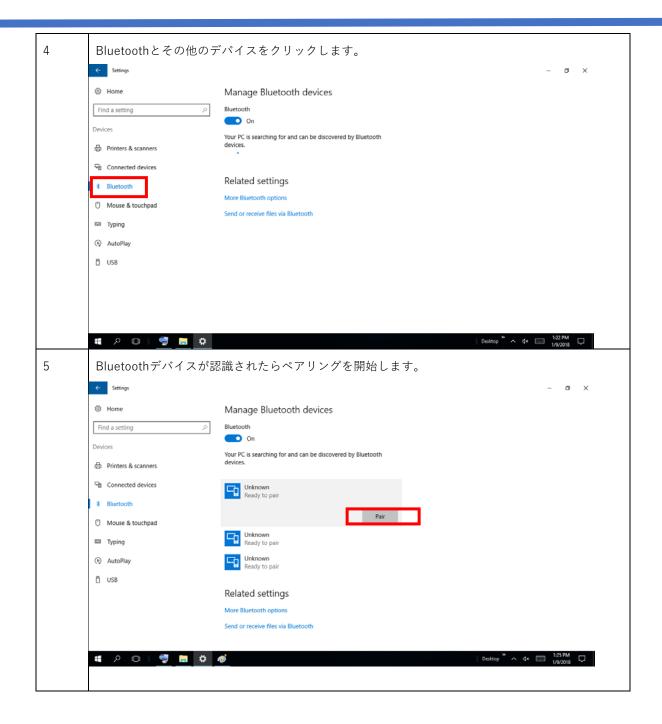


7 ネットワーク接続情報と必要に応じてAPNを入力します。

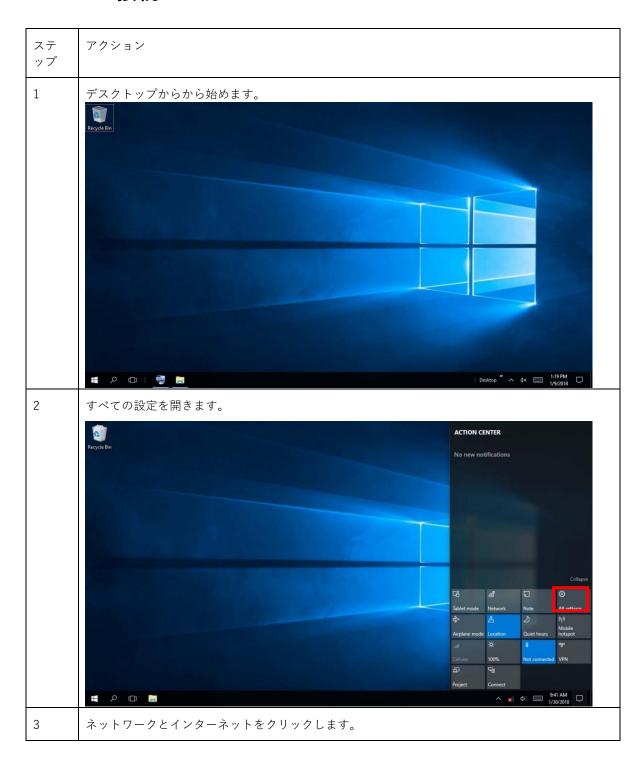
3.3 Bluetooth接続



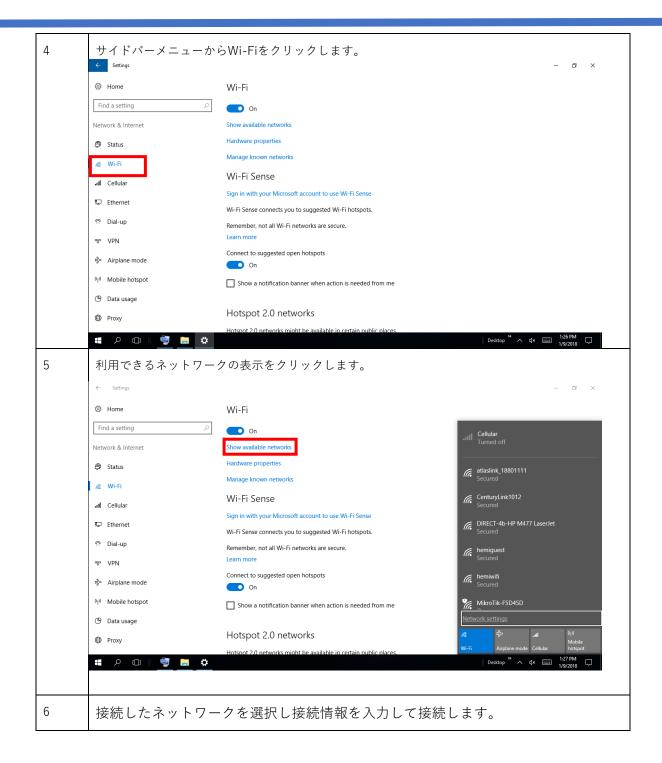
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3.4 Wi-Fi接続



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4. 付録

付録 A:製品仕様

ソフトウェア使用許諾契約書

品質保証について

付録A:製品仕様

System	
プロセッサ	Intel Atom デュアルコアCPU E3825 @ 1.33 GHz
ストレージ	SSD 32GB、RAM 2GB、128 GB with microSD
オペレーティングシステム	Windows 10

Screen	
ディスプレイタイプ	8インチTFT液晶、静電型タッチスクリーン
サイズ	192.8 mm x 116.9 mm
解像度	1280 x 720, 16:9
明るさ	750 nit

Input	
Start Button	1x メカニカル防水ボタン
Function Button	2 x メカニカル防水ボタン
Ignition Input	Yes

Communication		
シリアルポート	1 x RS232、1 x RS422/RS485/RS232(ソフトウェアスイッチ)	
カメラ	2 x CVBS	
USB	1 x USB2.0	
Ethernet	10M/100M	
Wi-Fi	IEEE 802.11b/g/n	
Bluetooth	Bluetooth 4.0	
モバイル	4G LTE(オプション)	
データ入出力	NMEA0183	

Mechanical	
サイズ	22.9 L x 16.9 W x 5.2 H (cm)
重さ	1.38 kg
マウント	アジャスタブル 1.5インチ RAM ボールマウント

Environment	
動作温度	-20°C ∼ +70°C
保管温度	-40°C ∼ +85°C
動作湿度	30% ~ 95%
保管湿度	45% ~ 80%
ケース	IP67
振動	EP455 5.15

Power	
入力電圧	7 – 36 VDC
消費電力	36 W
消費電流	3.0 A @ 12 VDC

Sensor and Multimedia	
1 x 2W ブザー	
1 x ヘッドフォンジャック	

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品質保証について

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Accessories/Parts	90 days
Battery, Battery Charger, Valves, Hoses and Cables	90 days
Repairs	90 days

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Product Limited Warranty: Unless the limited warranty included with any product covered by the se Terms grants different rights to the Buyer, HGNSS warrants to

Buyer, and only to Buyer, that the HGNSS products furnished shall be designed and manufacture d to conform to HGNSS specifications and all parts are and will

be free from defects in material and workmanship for the Warranty Period. During the Warranty Period, HGNSS liability is limited to replacing, repairing or issuing

credit for any product that is returned to HGNSS by the original Buyer freight prepaid and which upon inspection is determined by HGNSS to be defective in materials or workmanship.

2.3 *Notwithstanding the above-

mentioned Warranty Periods, in the event a longer warranty period is mandated under the laws o r regulations of the territory in which

the HGNSS product is sold, and that warranty period is applicable to your HGNSS product, said warranty period shall govern. An additional four-month "shelf life

period" is added to the standard warranty period for all OEM purchases.

2.4

The applicable Warranty Period shall commence on the date the product is shipped to the origin al purchaser by HGNSS. To be eligible for coverage under this

Warranty, a product believed to be defective must be received by HGNSS within the Warranty Period.

2.5

[NOTE: I would recommend moving the Exclusions set out in paragraph 4 to this location as this whole paragraph deals with the terms of the Warranty.]

2.6

Disclaimer: EXCEPT FOR THE LIMITED EXPRESS WARRANTIES SET FORTH IN SECTIONS 2.1 A ND 2.2 ABOVE, HGNSS MAKES NO REPRESENTATION OR WARRANTY WHATSOEVER

WITH RESPECT TO THE PRODUCTS, INCLUDING ANY (A) REPRESENTATION OR WARRANTY OF MERCHANTABILITY; OR (B) REPRESENTATION OR WARRANTY OF FITNESS FOR A

PARTICULAR PURPOSE OR (C) WARRANTY OF TITLE; OR (D) WARRANTY AGAINST INFRINGEM ENT OF INTELLECTURAL PROPERTY RIGHTS OF A THIRD PARTY; WHETHER EXPRESS

OR IMPLIED AND WHETHER ARISING BY LAW, COURSE OF DEALING, COURSE OF PERFORMAN CE, USAGE OF TRADE OR OTHERWISE. BUYER ACKNOWLEDGES THAT IT HAS NOT

RELIED UPON ANY REPRESENTATION, CONDITION OR WARRANTY MADE BY HGNSS, OR ANY OTHER PERSON ON HGNSS'S BEHALF, EXCEPT AS SPECIFICALLY PROVIDED IN

SECTIONS 2.1 AND 2.2.

3. Warranty Repair Service Policy:

3.1

Warranty Repair Procedure: HGNSS reserves the right to refuse warranty services if the date of purchase of the product cannot be proven or if a claim is made

outside the Warranty Period. Claims for shipment damage (evident or concealed) must be filed with the carrier. No product may be returned for repair, whether in

warranty or out of warranty, without HGNSS approval. No credit will be given, nor repairs made to products returned without such approval. Products must be

returned, transport prepaid, to the HGNSS facility (no C.O.D. or Collect Freight accepted) in accordance with HGNSS product return procedures then in effect.

Returned products must be received no later than 14 days for US/Canada or 28 days for internat ional after approval. Warranty Determination of Returned

Products: Following HGNSS or its authorized representative's examination, warranty or out-ofwarranty status will be determined. If upon examination a warranted

defect exists, then the product(s) will be repaired at no charge and shipped, prepaid, back to Buy er. Where HGNSS elects to replace a product or parts, repair parts

and replacement products will be provided on an exchange basis and will be either new, equival ent to new or reconditioned. All replaced parts and products

become the property of HGNSS. Warranty repairs do not extend the original Warranty Period.

3.2 Non-

Warranty Determination of Returned Products: Following HGNSS examination, Buyer shall be no tified of the repair cost of products out-of-warranty. At such

time Buyer must issue a valid purchase order to cover the cost of the repair and freight, or authorize the product(s) to be shipped back as is, at Buyer's expense

3.3 Non-

responsibility for monetary loss or lost data. HGNSS shall not be responsible for any modificati on or damage to, or loss of any programs, data, or other

information

stored or hosted by HGNSS, provided to HGNSS in connection with any service, or stored on any product, including any product serviced hereunder, or for the

consequence of such damage or loss, e.g., business loss in the event of hardware, software, program or data failure. It is the customers responsibility, to backup

data and to remove all features, parts, alterations, and attachments not covered by warranty prior r to releasing the product to HGNSS. The product will be returned

to the customer configured as originally purchased, subject to availability of software.

4. Exclusions

4.1

This Warranty does NOT extend to products that have been, as determined by HGNSS exercisin q its sole discretion:

 Misused, abused, modified, improperly maintained, noncertified repaired or serviced by anyone other than an authorized and certified HGNSS

Technician.

Damaged or rendered defective due to accident, act of God, or any other event or condition beyond the control of HGNSS, including but not limited

to, accident, fire, water, hazards, atmospheric conditions, and/or the performance/availability of third party services.

Damaged or rendered defective as a result of the use of the product in combination with other d evices or accessories that are not approved by HGNSS

for use with the product.

- Operation outside of the environmental specifications of the product.
- 5. Governing Law

5.1

This agreement and any disputes relating to, concerning or based upon the product should be g overned by and interpreted in accordance with the laws of

the State of Arizona in the United States of America.

6. Repair or Replacement

6.1

Warranty service may be obtained by contacting HGNSS. Purchaser agrees to insure the product or assume the risk of loss in transit, to prepay shipping charges, and

to use the original instrument carrying case and shipping container or the equivalent. Do not se nd accessories with item returned for repair service unless requested

by HGNSS. All Mounting brackets must be removed from product prior to sending to HGNSS for service otherwise, any mounting hardware components attached

to returned products will be removed to accommodate repair service and will not be returned to the customer

6.2 Contact TechSupport@hgnss.com for proper instructions on returning products.

6.3

If HGNSS replaces a product, the Warranty Period for the replacement product will be the longer of 90 days from replacement or the balance of the Warranty

Period for the original product.

6.4

HGNSS reserves the right to refuse repair of products that have been damaged due to excessive or inappropriate use.

7. Requesting an SRO

Visit www.support.hgnss.com Toll-Free Phone: +1 855 203 1770

Phone: +1 480 348 6380

Email: TechSupport@HGNSS.com

7.1

To have an SRO issued for repair of your product, you will need to provide the product number, s erial number, contact info and issue you are experiencing with the

product.

8. Non- Warranty SRO & Repair Estimates

8.1 All non-

warranty repairs performed by HGNSS will be warranted for 90 days against defects to parts an d labor.

8.2 For non-

warranty repairs, HGNSS will provide a written estimate of repair charges within 72 hours after we receive your instrument. Although we do our best to

provide the most accurate first estimate, your estimate could change due to unseen failures or unforeseen circumstances during the estimation and/or repair

process.

8.3

We must have a written approval with deposit or a purchase order to initiate the repair. HGNSS s ervice has a minimum charge which includes diagnostics of

USD\$250.00 per SRO and each additional hour is charged at an hourly rate of USD\$120.00. We allow 30 days from the estimate notification date for the approval.

If the repair is not approved within 30 days, the instrument will be returned unrepaired following the "Non-Warranty" shipping returns process and a denial fee

of USD\$250.00 will be invoiced in addition to freight and handling.

8.4 Estimates can be approved in two ways:

· By e-mail to TechSupport@hgnss.com please include a purchase order for the repair

•

By signing the electronic quote sent via RightSignature No Verbal authorizations will be accepte d.

8.5

It is HGNSS policy to complete approved repairs and ship within 14 days of repair approval and PO number being provided. In some instances, this may be longer due to

unforeseen conditions or additional repairs required not seen during the initial troubleshooting. I f this happens, a new estimate will be provided, and your repair will be

addressed in the most expeditious manner.

8.6

After the completion of repair, the product will be sent to the buyer and the invoice will be issued

9. Return Material Authorization (RMA) Policy

9.1

An RMA is used for the return of dead on arrival (DOA) and products shipped in error at the fault of HGNSS.

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Returns for credit/return items must be authorized by the customer's account manager. Then a RMA will be issued to the customer who can return the authorized

products for credit in original packaging and in new unused condition.

9.3

RMA/DOA Goods must be received within the following time frames: Domestic US and Canada - 14days

International - 28 days

9.4

Products must be returned to HGNSS in the original packaging and instrument case, including all associated parts and accessories. Missing parts and accessories

will be debited from your pending credit.

- 9.5 Products must be returned to HGNSS in NEW condition in the original packaging.
- 9.6 Contact your Account Managers for RMA authorization.
- 10. Advanced replacement of product

10.1

An advanced replacement will be issued for a failed product that is within 90 days of original purchase date.

10.2

When requesting an SRO for advanced replacement a PO number or other form of secured pay

ment must be provided to HGNSS Technical Support prior to SRO

being issued. No advanced replacements will be shipped without a PO number.

10.3

Upon product return to HGNSS, the returned product will be evaluated, and a determination will be made, at the sole discretion of HGNSS, as to whether the product was

misused, abused, improperly handled or applied improperly. The customer will be responsible for all repairs or have the option to have the product returned and be charged

the cost of the advanced replacement and all incurred shipping cost.

- 11. Service Life After End of Life Production
- 11.1 Products manufactured by HGNSS:

HGNSS will use reasonable efforts to make available technical support for 3 years and service p arts for 2 years from production end date.

All products are covered for warranty repair to include parts and labor or replacement during thi s period (by HGNSS decision on case by

case basis).

11.2 HGNSS offers:

Repair of original product based on material availability refurbished products, new 6-month warranty will apply

Sale of similar new product if product is still in production (pricing on case by case basis)

Sale of new replacement product (pricing on a case by case basis)

11.3

This policy only applies to serialized products manufactured by HGNSS, HGNSS has no policy c oncerning support of products for accessories.

12. Requesting Onsite Support and Fees

12.1

Submit all requests for onsite support or training to the HGNSS Tech Support Portal at www.support.hgnss.com or by calling the Technical Support Manager. (See

contacts section 13)

12.2 Cost of services will be billed out at USD\$1,700 per day (not including travel expenses). 3-day minimum for all North/South America travel and 4-day minimum for

all other International travel. The travel related expenses and arrangements will be discussed an d agreed by the customer in advance.

12.3

The customer will receive a formal quote which must be signed and returned to HGNSS with a P urchase Order before dates will be confirmed and any travel

booked.

Please contact our Technical Support Team for more details.

hemitech

13. Hemisphere GNSS Technical Support contact info:

Technical Support Hotline: Phone: 1-855-203-1770

Web Portal - Visit www.support.hgnss.com Email- TechSupport@hgnss.com

Technical Support Manager:

Email - TechSupportMgr@hgnss.comWarranty Notice

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