GNSS Configuration Guide for PAS Systems





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1 Introduction

1.1 Scope

This manual describes how to configure the Global Navigation Satellite System (GNSS) components in PAS systems running iX Flight Pro.

If you purchased the GNSS option from Phase One, the GNSS is preconfigured by Phase One accordingly. Refer to this guide if you need to reset the GNSS to the original Phase One configuration as detailed in the following sections:

- Section 2 Overview
- Section 3 Hardware Connections
- Section 4 Configuring the AP+ through the Browser User Interface
- Section 5 Configuring the POS AVX 210 through the Browser User Interface
- Section 6 Configuring the POSAV V6 through POSView
- Section 7 Configurating iX Flight Pro GNSS Settings

1.2 Applicable Documents

ltem	Manual		
Phase One iX Controller/PAS Controller	Connecting to the iX Controller Using Remote Desktop Connection		
Phase One iX Flight Pro	iX Flight Pro Operation Guide		
Phase One PAS 150MP MK2	PAS 150MP MK2 Operation Guide		
Phase One PAS 280MP MK2	PAS 280MP MK2 Operation Guide		
Phase One PAS Pod	PAS Pod Operation Guide		

1.3 List of Terms and Abbreviations

Term/Abbreviation	Description			
GNSS	Global Navigation Satellite System.			
IMU	Inertial measurement unit.			
INS	Inertial Navigation System.			
	Note Applanix refers to some IMU Settings pages as "INS".			
PPS	Pulse-per-second (time synchronization output mark).			



2 Overview

Phase One Aerial Systems (PAS) uses Applanix solutions hardware and software to provide GNSS services for its platforms as follows:

- Trimble AP+XX on iX Controller MK5-based systems and PAS Pod
- POS AVX 210 on iX Controller MK4 and iX Controller MK5-based systems
- POSAV V6 on iX Controller MK4 and iX Controller MK5-based systems

Note

Throughout this document, all GNSS and communication data referring to iX Controller MK5 is also applicable to iX Controller MK6.

The following figure shows the GNSS commands and data transferred between PAS system components and the GNSS. The signals flow is the same for both an internal GNSS card and an external GNSS unit.



Data and Signal Flow between PAS Components



3 Hardware Connections

3.1 AP+XX in iX Controller MK5-Based Systems

3.1.1 Compatible Hardware

- AP+ pre-installed in iX Controller MK5
- IMU-69, IMU82, IMU91, IMU57

3.1.2 Connecting Cables between Components

The following table and figure show the connections between system components for a PAS iX Controller MK5-based system with an internal AP+ GNSS.

Note

- The figure shows a single band system without the Multisync cable between cameras.
- Aircraft power cables are not shown.

Cable P/N	Description	Connections
70364000	Power cable, iX Controller/Camera (one for each camera)	 iX Controller, AUX2 ports iXM-XXX, right-LEMO port
73234000	USB cable (one for each camera)	 iX Controller, USB port iXM-XXX, USB port
70378000	Camera trigger, MEP and image data	 iX Controller, I/O port iXM-RS150, left LEMO port (on one of the cameras)
75007000 (if more than one camera is present – not shown in figure below)	Multisync cable	 iXM-RS150, middle LEMO port (on the same camera to which the Camera trigger & MEP cable is connected) iXM-RS150, left LEMO port (on the other camera)
73260000, 3 m 73285000, 0.5m 73293000, 1.6 m	Mount control	 iX Controller, COM port Mount, INTERFACE port
73267000 for IMU69, 3 m 73273000 for IMU82/IMU91/IMU57, 5 m 73278000 for IMU82/IMU91/IMU57, 3 m 75098270 for IMU82/IMU91/IMU57, 8 m	IMU data	 iX Controller, IMU port IMU
-	Antenna cable (supplied with antenna)	iX Controller (rear panel)





*See table for cable details



3.2 AP+ XX in PAS Pod

3.2.1 GNSS Options

The following Applanix AP+ cards integrated in the PAS Controller can be used with the following IMU models:

- AP+ 510 with IMU-91
- AP+ 610 with IMU-57

3.2.2 Connecting Cables between Components

The following table and figure show the connections between system components for a PAS Controllerbased system with an internal AP+ GNSS.

Note

Aircraft power cables are not shown.

P/N	Description	Connects to
73284000	iX Controller to Somag GSM 4000 mount	1. iX Controller, POWER
	power cable	2. Somag Mount, POWER SOCKET
73285000	iX Controller to Somag GSM 4000 mount	1. iX Controller, CONTROL
	control cable	2. Somag Mount, INTERFACE
-	Antenna cable (supplied with antenna)	iX Controller GNSS port

PAS Controller Front Panel



PHASEONE

3.3 POS AVX 210 on iX Controller MK5-Based Systems

Note

To use an external GNSS unit with an iX Controller MK5, you must first disable the internal AP+ GNSS - see section 3.6 - Using an iX Controller MK5-based System with an External GNSS.

3.3.1 GNSS Options

The POS AVX 210 includes an internal IMU.

3.3.2 Connecting Cables between Components

The following table and figure show the connections between system components for a PAS iX Controller MK5-based system with a POS AVX 210 GNSS.

Note

Aircraft power cables are not shown.

P/N	Description	Connects to
75016000	PAS Communication cable	 D-Type connector to POS AVX 210 IO2 port iX Controller-PWR connector to an iX Controller, AUX2 power out port iX Controller-COM connector to iX Controller, COM port SOMAG mount-INT connector to Mount INTERFACE port iX Controller-ETH connector to iX Controller Ethernet port iX Camera-I/O connector to iXM-XXX left LEMO port
70364000	Power cable, iX Controller/Camera	 iX Controller, AUX2 power out port iXM-XXX, right LEMO port
73234000	USB cable	 iX Controller, USB port iXM-XXX, USB port
70378000	Camera control cable (trigger)	 iX Controller, IO port iXM-XXX, middle LEMO port
-	Antenna cable (supplied with antenna)	 Aircraft Antenna Connector POS AVX 210, A1







3.4 POS AVX 210 on iX Controller MK4-Based Systems

3.4.1 GNSS Options

The POS AVX 210 includes an internal IMU.

3.4.2 Connecting Cables between Components

The following table and figure show the connections between system components for a PAS iX Controller MK4-based system with a POS AVX 210 GNSS.

Note

Aircraft power cables are not shown.

P/N	Description	Connects to
75016000	PAS Communication cable	 D-Type connector to POS AVX 210 IO2 port iX Controller-PWR connector to an iX Controller, AUX2 power out port iX Controller-COM connector to iX Controller, COM port SOMAG mount-INT connector to Mount INTERFACE port iX Controller-ETH connector to iX Controller Ethernet port iX Camera-I/O connector to iXM-XXX left LEMO port
70364000	Power cable, iX Controller/Camera	 iX Controller, AUX2 power out port iXM-XXX, right LEMO port
73234000	USB cable	 iX Controller, USB port iXM-XXX, USB port
70378000	Camera control cable (trigger)	 iX Controller, IO port iXM-XXX, middle LEMO port
-	Antenna cable (supplied with antenna)	 Aircraft Antenna Connector POS AVX 210, A1







3.5 POSAV V6 on iX Controller MK4/MK5-Based Systems

Note

To use the POSAV V6 with an iX Controller MK5, you must first disable the AP+ - see section 3.6 - Using an iX Controller MK5-based System with an External GNSS.

3.5.1 GNSS Options

The POSAV V6 can use the following external IMUs:

- Applanix IMU 82
- Applanix IMU 91
- Applanix IMU 57

3.5.2 Connecting Cables between Components

The following table and figure show the connections between system components for a PAS iX Controller MK5-based system with a POSAV V6 GNSS.

Note

Aircraft power cables are not shown.

P/N	Description	Connects to
75035000	Ethernet	1. iX Controller, Ethernet port
		2. POSAV V6, Ethernet port.
75036000	Power cable, iX Controller/POSAV V6	1. iX Controller, AUX2 power out port
	(red ring on connectors)	2. POSAV V6, PWR
		(red ring on connector)
73260000/	iX Controller/SOMAG mount cable	1. iX Controller, COM port
73285000/		2. SOMAG mount, INTERFACE port
73293000		
75015000	POSAV V6/Camera cable (event)	1. POSAV V6, IO3 port.
	(blue ring on connector)	(blue ring on connector)
		2. iXM-XXX, left LEMO port
70364000	Power cable, iX Controller/Camera	1. iX Controller, AUX2 power out port
		2. iXM-XXX, right LEMO port
73234000	USB cable	1. iX Controller, USB port
		2. iXM-XXX, USB port
70378000	Camera control cable (trigger)	1. iX Controller, IO port
		2. iXM-XXX, middle LEMO port
-	Antenna cable (supplied with	1. Aircraft Antenna Connector
	antenna)	2. POSAV V6, A1
-	IMU data cable	1. IMU
	(blue ring on connectors)	2. POSAV V6, IMU







3.6 Using an iX Controller MK5-based System with an External GNSS

This section describes the additional actions required for disabling the AP+ card in an iX Controller MK5 using an external GNSS.

Note

- To connect components for a POS AVX 210 on iX Controller MK5-Based system, see section 3.3 POS AVX 210 on iX Controller MK5-Based Systems.
- To connect components for a POS AV V6 on iX Controller MK5-Based system, see section 3.5-POSAV V6 on iX Controller MK4/MK5-Based Systems.

3.6.1 Modifying the iX Controller Communication Configuration

iX Controller MK5 has an internal AP+ GNSS card that communicates on the same IP address used by the external Applanix GNSS. The first step will be to disable the internal communication. The second step will be to configure the iX Controller's right ethernet port to communicate at the required address.

3.6.1.1 Disabling AP+ Internal Communications

1. In the Windows search box, type view n and tap View network status and tasks.

A	II Apps Documents Web	More 🔻					
Bes	Best match						
Ŋ	View network status and tasks Control panel						
Set	tings						
2	View network computers and devices	>					
¥	View network connections	>					
Sea	rch the web						
Q	view n - See web results	>					
Q	view network connections	>					
Q	view network	>					
Q	view nx2 nikon software	>					
Q	viewnx 2	>					
Q	view notifications	>					
Q	view network computers and devices	>					
Q	view national insurance record	>					
Q	view notifications windows 11 >						
Q	view n						



2. Tap Change adapter settings.

3. Tap and hold the AP+ network connection (it uses the LAN7850 hardware) and tap **Properties**.

4. Tap Internet Protocol Version 4 (TCP/IPv4) and tap Properties.

5. Tap Use the following IP address checkbox.



1 📃 - Ca

Notwork and Internet + Network and Sharing Center
 View your basic network information and set up connections

Accessible Internet Connections III Bluenet

> castype: No notwo noctional U Ethanot 3

View your active networks

Network 2 Driv to untern

10



- 6. Type the following IP address: Internet Protocol Version 4 (TCP/IPv4) Properties × 192.168.52.101 General You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings. 7. If the Subnet mask field is not filled in automatically, type 255 255 255 0. Obtain an IP address automatically • Use the following IP address: IP address: 192 . 168 . 52 . 101 Subnet mask: 255.255.255.0 Default gateway: Obtain DNS server address automatically • Use the following DNS server addresses: Preferred DNS server: Alternate DNS server: Validate settings upon exit Advanced...
- 8. Tap OK.
- 9. Close all network windows.

3.6.1.2 Modifying the iX Controller Right Ethernet Port

For communication with external GNSS.

1. Tap/click the ethernet 2 port and tap/click on properties.





OK Cancel

2. Change the IP properties as shown here:

General							
You can get IP settings assigned this capability. Otherwise, you for the appropriate IP settings	ed automatically if your network supports need to ask your network administrator						
Obtain an IP address automatically							
Use the following IP address	ess:						
IP address:	192 . 168 . 53 . 101						
Subnet mask:	255.255.255.0						
Default gateway:	20 DA 20						
Obtain DNS server addres	ss automatically						
• Use the following DNS ser	ver addresses:						
Preferred DNS server:	3 13 3						
Alternate DNS server:	24 24 24						
Validate settings upon ex	dt Advanced						

3. Tap/click OK.

3.6.2 Installing Software on the iX Controller MK5

If not yet installed, install the following software on the iX Controller MK5:

1. iX Flight Pro (download from <u>https://www.phaseone.com/download-categories/ix-flight-pro-software/</u>).

If you are using an POSAV V6, install POSView from Applanix's support page.



4 Configuring the AP+ through the Browser User Interface

Note

- Make sure your system is updated with the latest Applanix firmware.
- The following screenshots and configurations were taken from a system using the following hardware/firmware:
 - Applanix hardware: APX-15 V3
 - Active Firmware Version: 8.21.004
 - Active Core Engine Version: 5.60

4.1 Configuring the Receiver

4.1.1 Tracking

1. In the menu, under **Receiver Configuration**, tap/click **Tracking** and configure the parameters as shown following:

	Tracki	na			AP+60 AV
Receiver Status					
Satellites	Elevation M	look 10			
Data Logging	Elevation M	ask IV	1		
Receiver Configuration	Clask Stee	St III Disable V	1		
Summary	CIUCK SIEE	ning Disable V]		
Position Antenna	Type	Signal	Enable	Ontions	
Vector Antenna	CPS			opuona	
Tracking	GF3	LT-C/A			
Correction Controls	GPS	L1C			
Position	GPS	L2E		L2C or L2E	
General	GPS	L2C		CM + CL \sim	
INS Onboard	GPS	L5		I+Q ~	
INS Remote	SBAS	L1 - C/A			
External Sensor Control	SBAS	15			
Application Files	OLONIAGO	LO			
Reset Default Language	GLUNASS	LT-CA			
Delaun Language	GLONASS	L1P			
I/O Configuration	GLONASS	L2P			
MSS Corrections	GLONASS	L2 - C/A			
Network Configuration	GLONASS	L3			
Security	Galileo	E1			
Firmware	Galileo	E5 - A			
Help	Galileo	ES-A	000	<u>.</u>	
	Galileo	ED-D			
	Galileo	E5 - AltBOC		e	
	BeiDou	B1			
	BeiDou	B1C			
	BeiDou	B2			
	BeiDou	B2A			
	BeiDou	B2B			
	BeiDou	B3			
	0788	11 0/4			
	0205	LT-UA			
	QZSS	L1S			
	QZSS	L2C			
	QZSS	L5			
	QZSS	L6			
	IRNSS	L5 - C/A			
					4
	OK Cancel				



4.1.2 Position

1. For fixed wing aircraft - in the menu, under **Receiver Configuration**, tap/click **Position** and configure the outlined parameter as shown following:

<u> </u>	Position
Receiver Status	
Satellites	PDOP Mask 99
Data Logging	Autonomous/Differential Engine Kalman
Receiver Configuration	Signal Tracking Bandwidth Wide
Summary	Beceiver Motion(Dynamic model) Airberne fixed wing
Position Antenna	Harizantal Provision 0.20
Vector Antenna	
Reference Station	Vertical Precision 0.30 [m]
Tracking Correction Controls	RTK Propagation Limit 10 V [Sec.]
Position	
General	DGNSS Age of Correction:
Navigation Controls	GPS 60 [Sec.]
INS Onboard	GLONASS 60 [Sec.]
INS Remote	Galileo 60 [Sec.]
External Sensor Control	BeiDou 60 [Sec]
Application Files	DeiDou [0000]
Default Language	ITRF Realization (2014):
I/O Configuration	Epoch OFixed Current
MSS Corrections Network Configuration	OK Cancel
Parameter	Setting
eiver Motion (Dynamic model)	Airborne fixed wing



4.1.3 General

1. In the menu, under **Receiver Configuration**, tap/click **General** and configure the parameters as shown following:

<u> </u>	General
Receiver Status	
Satellites	Select Port Function: OSerial 3 CAN 1 O Event Markers 2
Data Logging	External Frequency [No Source Detected, Using Internal]
Receiver Configuration	1PPS On/Off Enable V Adjust Width Always On
Summary Position Antenna	Event 1 On/Off Enable V Slope Negative V Navigation Shift 0.000 [msec]
Vector Antenna Reference Station	Strobe Pulse Width 200 [msec] Active Pulse Edge Falling Edge V Trigger Camera One Photo Shot
Tracking	(Range 10msec - 990msec)
Correction Controls	OK Cancel
Position General	

Parameter	Setting
Select Port Function	Serial 3
1PPS On/Off	Enable
1PPS Always On	Selected
Event 1 On/Off	Enable
Event 1 Slope	Negative
Strobe Pulse Width Active Pulse Edge	Falling Edge



4.1.4 Navigation Controls

1. In the menu, under **Receiver Configuration**, tap/click **Navigation Controls**, and configure the outlined parameters as following:

Note

These settings assume an external IMU and mount are used and the aircraft is fixed wing.



Parameter	Setting	
Remote IMU Enable	Select only if using external IMU.	
Remote IMU Nav Solution	Select only if using external IMU.	
Remote IMU Type	If using an external IMU, select the IMU model.	
GAMS	Unselected.	
MAG Enable	Selected	
GIMBAL Enable	Selected	
Static bench Testing	Unselected	
	Warning Make sure that Static bench testing is NOT selected.	



4.1.5 Configuring Internal IMU

This section describes the orientation and lever arm of the AP+ card internal IMU, as installed in the iX Controller MK5 controller.

Note

If your system is using an external IMU, skip this section.



4.1.6 Configuring Remote IMU

This section describes how to configure a system using an external IMU.



Note

You also need to configure the Remote IMU parameters as described in section 4.1.4 - Navigation Controls.

4.1.7 IMU Remote Parameters

Note

Settings for the following parameters depend on your specific system:

- Reference to IMU Lever Arm
- Reference to IMU Mounting Angles
- 1. In the menu, under Receiver Configuration, tap/click INS Remote.
- 2. In the INS Remote window, tap/click IMU Remote and configure the following parameters:





Reference to IMU Mounting Angles [Deg]

INS Remote	AP+60 AV
Receiver Status	
Satellites	
Data Logging > Graphic Prerequisites	Reference
Receiver Configuration	1 Primary GNSS Antenna
Summary > Reference	Remote IMU
Position Antenna	- X Axis
Vector Antenna VIIIU Remote	-+ Y Axis
Tracking Reference to IMU Lever Arm [m]	- Z Axis
Correction Controls X 0.000	
Position y 0.004	
General Code	
Navigation Controls Z 300 1	
INS Remote Reference to IMU Mounting Angles [Deg]	
External Sensor Control X 0.000 [-180*,180*]	
Application Files Y: 0.000 [-160',160']	
Perset 2 0.000 [-180*,180*]	
Detaile Detail	
I/O configuration	
MSS Corrections	
Network Configuration Statementa	
Security Securit	
Firmware 9 Jenson 1	
Help OK Cancel	

Parameter	Setting
X Y Z	 In Reference to IMU Mounting Angles. all values are zero (equal to the aircraft axis) when: X of the IMU is towards the direction of flight Y is to the right Z is down Enter the difference in angles between the IMU X, Y, and Z axis and the aircraft X, Y, and Z axis. Verify the values using the interactive diagram in the right pane.

3. Click OK.

4. Reboot receiver for the changes to take effect.

4.1.8 GNSS Antenna Parameters

- 1. In the menu, under Receiver Configuration, tap/click INS Remote.
- 2. In the INS Remote window, tap/click GNSS Antenna and configure the following parameters:

Receiver Status	INS Remote	
Heoriver Status Satellites Data Logding Receiver Configuration Suttimary Position Antianna Vector Antianna Vector Antianna Vector Antianna Vector Antianna Vector Antianna Correction Controlis Resid Nargation Controlis Resid Distaut Language Detaut Language Distaut Language Distaut Language Distaut Language Distaut Corrections Network Configuration Security	> Graphic Prerequisites > Reference > IMU Remote ✓ GNSS Antenna Reference to Primary GNSS Lever Arm [m] X 0.704 Y. 0.141 Z. 1.128 1-0: 0.100 > Sensor 1 OK Cancel	Reference Process (USS Action No N
	Parameter	Setting

Parameter	Setting
X	
Y	For each axis, enter the distance from the mount
Z	rotation center to the antenna.
1-σ	

- 3. Click OK.
- 4. Reboot receiver for the changes to take effect.



4.1.9 External Sensor Control

Note

Phase One does not use YDC. Verify that YDC is NOT checked.

Receiver Status	External Sensor Control	
Satellites		
Data Logging	for a second	
Receiver Configuration	YDC Settings:	
Position Antenna	Enable YIV' 1	
Vector Antenna Reference Station	Desired Heading: 0 000 [0",360"]	
Tracking	Activation Threshold: 25.000 (0°,30°)	
Correction Controls Position	Cut-off Period: 0.001s,10000s]	
General	Gain: 0.00100 [0.00001,10000]	
INS Onboard	Follow Mean Track O Follow Desired Heading	
INS Remote		
Application Files	OK Cancel	

Parameter	Setting	
Enable YDC (Yaw Drift Correction)	Unselected	
	Note	
	Phase One applications do not use YDC.	

1. Click OK.

4.2 Configuring I/O Ports

4.2.1 Gimbal Communication I/O Settings

For Systems Using SOMAG CSM40/DSM400/GSM4000 mount:

1. In the menu, under I/O Configuration, click Port Configuration and configure the parameters as shown following:

	I/O Configuration		
Receiver Status			
Satellites	Serial1 / COM1 GIMBAL	\checkmark	
Data Logging			
Receiver Configuration	Serial Port Setup		
I/O Configuration	Baud: 115200 V Parity: N V Flow:	Disabled 💟	
Port Configuration	Input/Output		
MSS Corrections			
Network Configuration	Input:GIMBAL-GSM4000		
Security	GIMBAL		
Firmware			
Help	GIM01 🗸		
	OK Cancel		
Para	ameter	S	etting
IMBAL		GIM01	



4.2.2 Camera communication I/O Settings

1. In the menu, under I/O Configuration, click Port Configuration and configure the parameters as shown following:

	I/O Configuration	
Receiver Status		
Satellites	Serial2 / COM2 MMEA V	
Data Logging		
Receiver Configuration	Serial Port Setup	
I/O Configuration Port Summary Port Configuration	Baud: 115200 V Parity: N V Flow: Disabled V	
MSS Corrections	Input/Output	
Network Configuration	Output:NMEA-EVT (1 Hz), Output:NMEA-EN1	
Security	Input:External IMU	
Firmware	NMEA	
Help	AVR: Off GNS: Off PJT: Off PJT: Off PASHR: Off PASHR: Off DP: Off GSA: Off REX: Off DG: Off DG: Off GSA: Off REX: Off DG: Off DG: Off GGS: Off VGK: Off DC: Off GGS: Off VGK: Off EN1: On VE: Off GGA: Off HDT: Off VHD: Off GGK: Off DF: EN2: Off CGGA: Off PJK: Off ZDA: Off VGK: Off FGGA: Off PJK: Off ZDA: Off OF EN2: Off FGGA: Off PJK: Off ZDA: Off PJK: Off CGSA: Off PJK: Off CC: Off CGSA: Off PJK: Off CC: Off CGA: Off PJK: Off CC: Off PJK: Off CC: Off PJK: Off CC: Off PJK: Off CC: Off CC: Off PJK: Off PJK: Off CC: Off PJK: Off PJK: Off CC: Off PJK:	

Parameter	Setting
EVT	On
EN1	On
NMEA Legacy	Selected



4.2.3 TCP/IP Settings for Communication with iX Flight Pro

4.2.3.1 5017 - GSOF

1. In the menu, under I/O Configuration, click Port Configuration and configure the parameters for TCP/IP 5017 GSOF as shown following:

Dessive Status	I/O Configuration	AP+60 AV 5909C00236
Receiver Status		
Date Longing	TCP/IP 5017 GSOF	
Data Logging	Server: TCP Port: 15017 Delete	
Receiver Configuration		
Port Summary Port Configuration	Connected to remote 192.168.53.101 : 57456	
MSS Corrections		
Network Configuration		
Security	Authenticate, set password:	
Firmware		
Help	Input/Output	
	Output:GSOF	
	GSOF	
	Position Time [#01]: Off V Receiver Serial [#15]: Off V Radio Info [#57]: Off V	
	Lat,Long,Ht [#02]: Off V Current Time UTC [#16]: Off INS User Pos and APC [#58]: Off V	
	ECEF Position [#03]: Off Attitude Info [#27]: Off Event 1 Navigation Info [#59]: Off	
	Local LLH [#04]: Off Brief All SV Info [#33]: Off Event 2 Navigation Info [#60]: Off S	
	Local ENU #051 [Off V Detail All SV #34] [Off V Code Lat, Long, Ht [#62]; [Off V	
	TPIGNE NULL (MOVIE) CITE V RECEIVED BASE (#35): CITE V INS VNAV FULL NAV (#03): CITE V	
	Velocity (#0): Off Position Type Information (#37): Off NS S1NAV Rivio (#04): Off Position	
	DOP Info (#09) 5 Hz V LBand Status Info (#40) 0 ff V INS STNAV RMS (#66) 0 ff V	
	Clock Info [#10]: Off Sase Position and Quality [#41]: Off Gimbal Data [#69]: On S	
	Position VCV [#11]: Off V Multiple Page Detail All SV [#48]: Off V Lat,Long,MSLHt [#70]: Off V	
	Position Sigma [#12]: Off 🗸 INS Full Navigation Info [#49]: 20 Hz 🗸 Yaw Drift Correction [#71]: Off 🗸	
	Brief SV Info [#13]: Off V INS RMS Info [#50]: Off V	
	Detail SV Info (#14]: [Off V] Event Markers (#51]: On V	
	Sort Alphabetically Set All Off OK Cancel	

Parameter	Setting
DOP Info [#09]	5 Hz
INS Full Navigation Info [#49]	20 Hz
Event Markers [#51]	On
Gimbal Data [#69]	On



4.2.3.2 TCP 5018 - NMEA

1. In the menu, under I/O Configuration, click Port Configuration and configure the parameters for TCP/IP 5018 NMEA as shown following:

	I/O Configuration	AV
Receiver Status		0236
Satellites	TCP/IP 5018 VINMEA V	
Data Logging		
Receiver Configuration	Server: TCP Port: 5018 Delete	
I/O Configuration Port Summary Port Configuration	Client Output only/Allow multiple connections	
MSS Corrections	Disable Nagle Algorithm UDP Mode	
Network Configuration	Authenticate, set password:	
Security		
Firmware	Input/Output	
Help	Output:NMEA-GGA (1 Hz)	
	NMEA	
	AVR: Off GNS: Off PJT: Off EVT: Off BPQ: Off GRS: Off REX: Off PASHR: Off DP: Off GSA: Off RKC: Off DG: Off DTM: Off GSS: Off V ROX: Off DC: Off GBS: Off GSS: Off V ROX: Off EN1: Off GGA: 5Hz HDT: Off VGK: Off EN2: Off GGK: Off LLQ: Off VTG: Off V GLL: Off PJK: Off ZDA: Off	
	Standard NMEA Legacy IEC61162-1:2010/NMEA 0183 V4.10 Report Old Position Variations from standard Report max DQI=2 in NMEA GGA string Report max correction age 9 sec in NMEA GGA string Report extended information in NMEA GGA, GNS, and RMC strings Report ST message always as GPGST Report legacy talker id OK	
P	arameter Setting	
A	5 Hz	



4.2.3.3 TCP 5019 - TO4

Configure TCP/IP 5019 as shown below when you want iX Flight Pro to record TO4 on iX Controller SDD in addition to recording the TO4 in the GNSS system (requires compatible GNSS firmware).

1. In the menu, under I/O Configuration, click Port Configuration and configure the parameters for TCP/IP 5019 as shown following:

	I/O Configuration	
Receiver Status	-	
Satellites	TCP/IP 5019 V ETHERNET LOG V	
Data Logging		
Receiver Configuration	Server: TCP Port: 5019 Delete	
I/O Configuration Port Summary Port Configuration	Connected to remote 192.168.53.101 : 57457 Client Quitout only/Allow multiple connections	
MSS Corrections	Disable Nagle Algorithm	
Network Configuration	UDP Mode	
Security	Authenticate, set password:	
Firmware	In a start of the start	
Help	Input/Output	
	Output:ETHERNET LOG	
	ETHERNET LOG	
	Enabled V OK Cancel	
	Parameter	Setting

Parameter	Setting
Disable Nagle Algorithm	Selected
ETHERNET LOG	Enabled



4.3 Configuring Data Logging

1. In the menu, click Data Logging, and click Configure.

<u> </u>	Data L	oggin	ng				
Receiver Status			-				
Satellites	File System	Size	Availat	ole	Auto Delete		
Data Logging	/Internal	7 125 GB	6 124 GB	86%		Format	
Summary Data Files	/External	1.120 00	0.121 00	00 /		- on the	
RINEX Metadata	/External]	
FTP Push							
F IP Push Log	Sess	sion	Schedul	e	Sta	atus	Enab
Receiver Configuration	DEFA	ULT	000 000		Log	aina	
I/O Configuration	Measuremen Positions (nts 0.1 Sec.	Continuor	us	/Inte	ernal/	
MSS Corrections	Config	gure	240 10111	5	909C0023620	2305181200.1	T04
Network Configuration				-			No.

2. Configure the parameters as shown following:



Parameter	Setting
Enable	Selected.
Schedule	Continuous.
Measurement Interval	0.1 Sec.
Position Interval	0.01 Sec.



4.4 Configuring the Antenna

1. In the menu, under **Receiver Configuration**, click **Position Antenna** and configure the outlined parameter as shown following:

Receiver Status Satellites Data Logging Receiver Configuration Summary Position Antenna Vector Antenna Reference Station Tracking Correction Controls Position General	Position Antenna Antenna Type RINEX Name TRMAV39 NONE Antenna Serial Number Radome Serial Number Antenna Measurement Method Bottom of antenna mount Antenna Height [m] 0.0000	
Na Onboard INS Onboard INS Remote External Sensor Control Application Files Reset Default Language	Apply Antenna Correction to: RTCM V3 2 OK Cancel	
	Parameter	Setting
		Select the antenna installed on your aircraft.
itenna Type		Note
		Phase One supplies the AV39 antenna with the system.



5 Configuring the POS AVX 210 through the Browser User Interface

Note

- Make sure your system is updated with the latest Applanix firmware.
- The following screenshots and configurations were taken from a system using the following hardware/firmware:
 - Applanix hardware: APX-15 V3
 - Active Firmware Version: 8.21.004
 - Active Core Engine Version: 5.60

5.1 Configuring the Receiver

5.1.1 Tracking

1. In the menu, under **Receiver Configuration**, tap/click **Tracking** and configure the parameters as shown following:

<u>^</u>	Tracki	ng			
Receiver Status		•			
Satellites	Elevation M	ask 10			
Data Logging	Everes	st TM Disable V	1		
Receiver Configuration	Clock Steel		1		
Summary			-		
Antenna Reference Station	Туре	Signal	Enable	Options	
Tracking	GPS	L1 - C/A			
Correction Controls	GPS	1.2E		12C or L2E	
Position	CDC	120			
General	GPS	LZC		CM + CL V	
Application Files	GPS	L5		I+Q V	
Reset	SBAS	L1 - C/A			
Default Language	SBAS	L5			
I/O Configuration	GLONASS	L1 - C/A			
MSS Corrections	GLONASS	L1P			
Network Configuration	GLONASS	L2P			
Security	GLONASS	L2 - C/A			
Firmware	GLONASS	L3			
Help	Galileo	E1			
	Galileo	E5 - A			
	Galileo	E5 - B			
	Galileo	E5 - AltBOC			
	BeiDou	B1			
	BeiDou	B2			
	BeiDou	B2A			
	BeiDou	B2B			
	QZSS	L1 - C/A			
	QZSS	L1S			
	QZSS	L2C			
	QZSS	L5			
	IRNSS	L5 - C/A			
	OK Cancel]			



5.1.2 Position

1. For fixed wing aircraft - in the menu, under **Receiver Configuration**, tap/click **Position** and configure the outlined parameter as shown following:

	Position		
Receiver Status			
Satellites	PDOP Ma	sk 99	
Data Logging	RTCM 2 Type 31 Input GLONASS Datu	m PZ90 V	
Receiver Configuration	Autonomous/Differential Engli		
Summary	Signal Tracking Bandwid	th Wide	
Antenna	Bossiver Metion/Dynamic med		
Reference Station	Receiver Motion(Dynamic motion		
Tracking	Horizontal Precisio	on 0.30 [m]	
Correction Controls	Vertical Precision	on 0.30 [m]	
General	RTK Propagation Lin	nit 10 ∨[Sec.]	
INS			
Application Files	DGNSS Age of Correction:		
Reset	GF	S 60 [Sec.]	
Default Language	GLONAS	S 60 [Sec.]	
I/O Configuration	Galik		
MSS Corrections	BeiD	60 [Sec.]	
Network Configuration			
Security	ITRF Realization (2014):		
Firmware	Epo	ch O Fixed Current	
Help	OK Cancel		
Par	rameter	Sett	ing
ceiver Motion (Dvn	amic model)	Airborne fixed wing	



5.1.3 General

1. In the menu, under **Receiver Configuration**, tap/click **General** and configure the parameters as shown following:

	General	
Receiver Status		
Satellites	External Frequency [No Source Detected, Using Internal]	
Data Logging	1PPS On/Off Enable V Adjust Width Always On	
Receiver Configuration	Event 1 On/Off Enable Slope Negative Navigation Shift 0.000 [msec]	
Antenna Reference Station	Event 2 On/Off Enable Slope Negative Navigation Shift 0.000 [msec]	
Correction Controls		
General		

Parameter	Setting
1PPS On/Off	Enable
Event 1 On/Off	Enable
Event 1 Slope	Negative
Event 2 On/Off	Enable
Event 2 Slope	Negative



5.1.4 Configuring INS

Note

Ζ

Settings for the INS parameters depend on your specific system:

5.1.4.1 IMU Lever Arm

- 1. In the menu, under Receiver Configuration, tap/click INS.
- 2. In the INS Configuration window, tap/click IMU Lever Arm and configure the following parameters: as relevant for your system:







5.1.4.2 Mounting Angles

- 1. In the menu, under **Receiver Configuration**, tap/click **INS.**
- 2. In the INS Configuration window, tap/click Mounting Angles and configure the Reference to IMU Mounting Angles [Deg] parameters as relevant for your system:



X	In Reference to IMU Mounting Angles . all values are
Y	• V of the IML is towards the direction of flight
Z	
	• Y is to the right
	Z is down
	Enter the difference in angles between the IMU X, Y,
	and Z axis and the aircraft X, Y, and Z axis.
	Verify the values using the interactive diagram in the
	right pane.

3. Click OK.

4. Reboot receiver for the changes to take effect.



5.1.4.3 GNSS Lever Arm

- 1. In the menu, under **Receiver Configuration**, tap/click **INS**.
- 2. In the INS Configuration window, tap/click GNSS Lever Arm and configure the Reference to Primary GNSS Lever Arm [m] parameters as relevant for your system:

	INS Configuration	
Receiver Status		L'Enset and
Satellites		
Data Logging	> General	, Reference
Receiver Configuration Summary Antenna	> Graphic Prerequisites	Primary GNSS Antenna
Reference Station	> Mounting Angles	→ X Axis
Tracking		→ Y Axis
Correction Controls	✓ GNSS Lever Arm	-> Z Axis
General General Application Files Reset Default Language I/O Configuration MSS Corrections Network Configuration Security Firmware Help	Reference to Primary GNSS Lever Arm [m] Current Estimate [m] (In VEHICLE frame) X: 0.000 X: 0.784 X: 0.000 Y: 0.141 < Y: 0.000 Z: -1.128 Z: 0.000 1- 0.050 1- 0.001	T
	> IMU Lever Arm	
	Parameter	Setting

X	
Υ	For each axis, enter the distance from the mount
Z	rotation center to the antenna.
1-σ	

- 3. Click OK.
- 4. Reboot receiver for the changes to take effect.



5.2 Configuring I/O Ports

5.2.1 Gimbal I/O Settings

1. In the menu, under I/O Configuration, click Port Configuration and configure the parameters as shown following:

	I/O Configuration
Receiver Status	
Satellites	Serial1 / COM1 V GIMBAL V
Data Logging	
Receiver Configuration	Serial Port Setup
I/O Configuration	Baud: 115200 V Parity: N V
Port Configuration	Input/Output
MSS Corrections	
Network Configuration	Input:GIMBAL-GIM01
Security	GIMBAL
Firmware	
Help	
	OK Cancel

Parameter	Setting
GIMBAL	GIM01 - to obtain gimbal data recorded in T04 files.



5.2.2 Camera I/O Settings

1. In the menu, under I/O Configuration, click Port Configuration and configure the parameters as shown following:



Parameter	Setting
EVT	On
EN1	On
NMEA Legacy	Selected

Note

The above configuration assumes that the camera is configured for Applanix.



5.2.3 TCP/IP Settings for Communication with iX Flight Pro

5.2.3.1 5017 - GSOF

1. In the menu, under I/O Configuration, click Port Configuration and configure the parameters for TCP/IP 5017 GSOF as shown following:

	I/O Configuration
Receiver Status	
Satellites	TCP/IP 5017 V GSOF V
Data Logging	
Receiver Configuration	Server: TCP Port: 5017 Delete
I/O Configuration	
Port Summary	Orient Orient Orient Orient Orient Orient
Port Configuration	
MSS Corrections	
Network Configuration	Authenticate, set password:
Security	
Firmware	Input/Output
Help	Output:NMEA-GGA (1 Hz), Output:GSOF
	GSOF Position Time [#01]: Off v Brief SV Info [#13]: Off v Multiple Page Detail All SV [#48]: Off v Lat_Long,Ht [#02]: Off v Detail SV Info [#14]: Off v INS Full Navigation Info [#49]: 20 Hz v ECEF Position [#03]: Off v Receiver Serial [#15]: Off v INS Full Navigation Info [#49]: 20 Hz v Local LLH [#04]: Off v Current Time UTC [#16]: Off v Event Markers [#51]: On v Local ENU [#05]: Off v Attitude Info [#27]: Off v Radio Info [#57]: Off v Detta ECEF [#06]: Off v Brief All SV Info [#33]: Off v INS User Pos and APC [#58]: Off v Detail All SV [#34]: Off v Received Base [#35]: Off v Event 1 Navigation Info [#69]: Off v Velocity [#08]: Off v Received Base [#35]: Off v Event 1 Navigation Info [#60]: Off v DOP Info [#09]: §Hz v Battery/Memory Info [#37]: Off v Event 2 Navigation Info [#60]: Off v Position VCV [#11]: Off v LBand Status Info [#40]: Off v Lat,Long,MSLHt [#70]: Off v Position Sigma [#12]: Off v Base Position and Quality [#41]: Off v Soft Abplabetically

Parameter	Setting
Output only/Allow multiple connections	Selected
DOP Info [#09]	5 Hz
INS Full Navigation Info [#49]	20 Hz
Event Markers [#51]	On



5.2.3.2 TCP 5018 - NMEA

1. In the menu, under I/O Configuration, click Port Configuration and configure the parameters for TCP/IP 5018 NMEA as shown following:

<u> </u>	
Receiver Status	
Satellites	TCP/IP 5018 V NMEA V
Data Logging	
Receiver Configuration	Server: TCP Port: 5018 Delete
I/O Configuration Port Summary Port Configuration	□ Client ☑ Output only/Allow multiple connections □ Displa March Algorithm
MSS Corrections	Ulsable Nagle Algorithm
Network Configuration	Our mode our mode our states set password:
Security	
Firmware	Input/Output
Help	Output:NMEA-GGA (1 Hz), Output:GSOF, Output:NMEA-VTG (20 Hz), Output:NMEA-GSA (20 Hz), Output:NMEA-PASHR (20 Hz)
	Output:NMEA-EVT (1 Hz), Output:NMEA-EN1
	NMEA
	IMEA
	AVR: Off Off PJT: Off EVT: Off BPQ: Off GRS: Off REX: Off PASHR: Off DP: Off GSA: Off RMC: Off DG: Off DTM: Off GST: Off ROT: Off EN1: Off GBS: Off GSX: Off VGK: Off EN2: Off GGA: Off HDT: Off VHD: Off EN2: Off GGK: Off LQ: Off VTG: Off GOT GLI: Off PJK: Off ZDA: Off EN2: Off Standard ILQ: Off ZDA: Off ILQ: Off NMEA Legacy IEC61162-1:2010/NMEA 0183 V4.10 IReport Old Position Variations from standard Report max DQI=2 in NMEA GGA string
	Report max correction age 9 sec in NMEA GGA string Report extended information in NMEA GGA, GNS, and RMC strings Report GST message always as GPGST Report legacy talker id OK Cancel

Parameter	Setting
Output only/Allow multiple connections	Selected
GGA	1 Hz
NMEA Legacy	Selected
Report extended information in NMEA GGA, GNS, and RMC strings	Selected



5.3 Configuring Data Logging

1. In the menu, click Data Logging, and click Configure.

	Data Logging					
Receiver Status						
Satellites	File System Size Available		ole	Auto Dele	te	
Data Logging	/Internal	7.125 GB	5.486 GB	77%		Forma
Data Files	/External					
RINEX Metadata			С			
FTP Push Log	Sess	ion	Schedu	le	Status	Enable
Receiver Configuration	DEFA	ULT				
I/O Configuration	Measurements 0.1 Sec. Positions 0.01 Sec.		Continuo	us s	etting Time	
MSS Corrections			300 Min	300 Min.		
Network Configuration				_		
Security						

2. Configure the parameters as shown following:



Parameter	Setting
Enable	Selected.
Schedule	Continuous.
Duration	Enter the number of minutes per one file (the GNSS will create another file if the duration is exceeded).
Measurement Interval	0.1 Sec.
Position Interval	0.01 Sec.



5.4 Configuring the Antenna

1. In the menu, under **Receiver Configuration**, click **Position Antenna** and configure the outlined parameter as shown following:





6 Configuring the POSAV V6 through POSView

Note

- Make sure your system is updated with the latest Applanix firmware.
- The following screenshots and configurations were taken from a system using the following hardware/firmware:
 - Applanix hardware: AV-510 Version 6
 - Firmware Version: 1.6-12
 - Software: POSAV Version 11.23



6.1 Connecting to the POS-AV GNSS

1. Tap/click the Connect icon.

AV AV-POSView				<u></u>	
File Settings L	ogging View Tools	Diagnostics Help)		
2		192.1	68.53.100 -	🔆 😵	
Status POS Mode	Nav: Degraded	Accuracy	Attitude	Acc	uracy (deg)
GNSS Status	s Pri. CA	Heading	Roll (deg) Pitch (deg)	-3.299 1.876	0.070
GAMS	Not Available	Position	Heading (deg)	139.944	18.693
Disk Usage	3%	Velocity	Speed (kts) 0.	017 Track (d	eg 228.405
Position		Accuracy (m)	Velocity	Acc	uracy (m/s)
Latitude	32°09'51.4831" N	6.223	North (m/s)	-0.006	0.321
Longitude	34°55'47.4002" E	6.206	East (m/s)	-0.006	0.322
Altitude (m)	69.831	7.420	Down (m/s)	-0.075	0.235
Dynamics A Longitudinal	ngular Rate (deg/s) 0.182	Accel. (m/s²) 0.001	Events T Event 1	līme	Count
Transverse Vertical	0.202 0.039	0.007 -0.031	Event 2 PPS 12:22:	21.000000 GPS	17351
8/13/2023	12:22:21 GPS	4:49:10 POS	Logging Media: Idle	Monitor	



2. Verify the status bar displays **Connected**.

Status		Accuracy	Attitude		
POS Mode	Nav: Degraded	Attitude		Accur	acy (deg
IMU Status	ок	Mulude	Roll (deg)	0.260	0.071
GNSS Status	Pri. CA	Heading	Pitch (deg)	1.116	0.071
Gimbal	Off		Heading (deg)	154.719	28.029
GAMS	Not Available	Position			
Logging Med	ia Idle		Speed (kts)	150 Track (do	1 10 500
Disk Usage	3%	Velocity	Speed (kis) 0.	109 Hack (deg	1) 19.500
Position			Velocity		
		Accuracy (m)		Accu	racy (m/s
Latitude	32°09'51.4343"	N 6.278	North (m/s)	0.076	0.329
Longitude	34°55'47.4843"	E 6.234	East (m/s)	0.027	0.329
Altitude (m)	67.892	7.422	Down (m/s)	-0.046	0.235
Dynamics			Events		
A	ngular Rate (deg/s)	Accel. (m/s ²)	1	īme	Count
Longitudinal	0.033	-0.003	Event 1		
Transverse	0.063	0.003	Event 2		
Vertical	0.042	-0.016	PPS 7:55:	23.000000 GPS	2796



6.2 Configuring I/O Ports

6.2.1 COM1 - NMEA

1. On the main menu, tap/click Settings > Input/Output Ports.



2. Tap/click COM1 and configure the parameters as shown following:

Baud Rate		Parity None Even Odd	Data Bits C 7 Bits C 8 Bits	Stop Bits	Flow Control None Hardware XON/XOFF
Output Select	NMEA -	Inpu	It Select	None	•
□ GGK ^ □ RMC ♥ PAPLEVT1 □ PAPLEVT2 □ PAPLPOSEO1 □ PAPLPOSEO2 ♥	Update Rate 20 Hz]			
GGK ↑ RMC ♥ PAPLEVT1 PAPLEVT2 PAPLPOSE01 ♥ PAPLPOSE02	Update Rate 20 Hz			Close	Apply

3. Tap/click Apply.



6.2.2 COM2 - GIM01

 I ap/click COM2 and configure the parameters as shown follow
--

115200 🔽	Image: Solution of the second of the seco
Output Select None	Input Select Gimbal Gimbal Type GIM01 Gimbal ▼
	Update Rate 20 Hz

GIM01 Gimbal

2. Tap/click Apply.

Туре



6.3 Configuring Events

1. On the main menu, tap/click Settings > Input/Output Ports.



2. Tap/click Event1 and configure the parameters as shown following:

Edge Trigger	Guard Time (msec)
C Positive	0
	NAV Shift Time (msec)
• Negative	
otes: . Guard Time will restri . NAV Shift Time will a Event Based Nav grp	ct event time gap djust the time in 206 and grp 207

11

3. Tap/click Apply and then OK.



6.4 Configuring Ethernet Real-Time Output Control

1. On the main menu, tap/click **Settings** > **Input/Output Ports**.



2. Tap/click Real Time 2 and configure the parameters as shown following: Ethernet Real-Time Output Control ×

1 Navigation Solution 2 Performance Metrics 3 Primary GNSS Data	Group 1, 222, 223 Output Rate 20 Hz
4 IMU Data	Protocol
	CCP CUDP Unicast UDP Broadcast Log File Default Append C Overwrite Browse
POSPac Deselect All	Start Logging Stop Logging

Parameter	Setting
Control - Group 1, 222, 223 Output Rate	20 Hz
Group Select - 1 Navigation Solution	Selected
Group Select - 3 Primary GNSS Data	Selected
Group Select - 5 Event 1	Selected
Group Select - 200 Gimbal Encoder Data	Selected
Group Select - 222 Ref Frame Navigation Solution	Selected

3. Tap/click Apply > OK.



6.5 Configuring Lever Arms and Mounting Angles

1. On the main menu, tap/click Settings > Installation > Lever Arms & Mounting.



2. Tap/click Lever Arms & Mounting Angles and configure the parameters relevant to your system: Lever Arms & Mounting Angles X

Ref. to IN	IU Lever Arm	- IMU Frame v	v.r.t. Ref. Frame
X (m)	0.000	X (deg)	0.000
Y (m)	0.094	Y (deg)	0.000
Z (m)	-0.268	Z (deg)	0.000
Ref. to P	rimary GNSS Lever	Arm Ref. Frame v	v.r.t. Vehicle Frame
X (m)	0.784	X (deg)	0.000
Y (m)	0.141	Y (deg)	0.000
Z (m)	-1.128	Z (deg)	0.000
otes:			
Ref. = F	Reference		
. w.r.t. =	With Respect To		
CNSSI	ever Arms are meas	sured in aircraft fram	e



Parameter	Setting
X (m)	
Y (m)	For each axis, enter the distance from the mount
Z (m)	



IMU Frame w.r.t. Ref Frame

Parameter	Setting
X (deg)	In Reference to IMU Mounting Angles. all values are
Y (deg)	zero (equal to the aircraft axis) when:
Z (deg)	 X of the IMO is towards the direction of flight Y is to the right
	• Z is down
	Enter the difference in angles between the IMU X, Y, and Z axis and the aircraft X, Y, and Z axis.

Ref. to Primary GNSS Lever Arm (Antenna)

Parameter	Setting
X (m)	
Y (m)	For each axis, enter the distance from the mount
Z (m)	

- 3. Tap/click Apply > OK.
- 4. Tap/click Settings and then Save Settings.







7 Configurating iX Flight Pro GNSS Settings

Note

For a detailed description of iX Flight Pro, refer to the iX Flight Pro Operation Guide for your software version.

7.1 AP+/POS AVX 210/POSAV V6

Note

iX Flight Pro and POSView cannot be used simultaneously since they use the same ports.

To configure GNSS settings:

1. in iX Flight Pro, in the Home window, tap **Settings**.



2. Tap System Settings and tap GPS/IMU.



Configure the following parameters:

Category	Group	Parameter	Default Value	Description
GPS/IMU	General	GPS Device	• For AP+/POS AVX 210:	Format going into iX
			ApplanixGsof	Flight Pro
			For POSAV V6:	
			ApplanixPosav	
		GPS Connection	Ethernet	
		Status Timeout	1000 milliseconds	



Category	Group	Parameter	Default Value	Description			
		Reconnect	2000 milliseconds				
		Timeout					
	Serial	Serial Port	N/A				
		Port Baud Rate	N/A				
	Ethernet	IP Address	192.168.53.100	GPS Ethernet IP Address			
		Port for NMEA	 For AP+/POS AVX 210: 5018 For POSAV V6: 5600 	NMEA			
		Port for GSOF/POSAV	 For AP+/POS AVX 210: 5017 For POSAV V6: 5606 	GPS Ethernet Port for GSOF/POSAV			
	Applanix T04 Logfile*	Disable Capturing if TO4 Logging is Not Running	Off				
		Applanix T04 Logfile	On				
		Port for Applanix T04	5019				
		Applanix TO4 Max Storage Size	1024 MB				
		Applanix TO4 Status Timeout	10000 ms	Applanix T04 Logging Status Timeout			
	Mount Data GIM01 To Applanix GPS	Applanix GIM01	Off	Provide mount information from mount to GPS through iX Flight Pro			
		Serial Port	COM10 (or port allocated by Windows).	Applanix G M01 Serial Port			
		Baud Rate	115200	Applanix GIM01 Serial Port Baud Rate			
	Applanix Application	Applanix IP Address	192.168.53.100	Should be the same as GPS Ethernet address			
		Applanix Application	Open App	Opens the Applanix application.			

* T04 logging for POSAV is not yet implemented. Activate this logging using POSVIEW.

3. Tap Camera Settings and scroll down to Left Terminal.

Flight Pro											11 × ×		
	< >	мм	012009	Ξ	мм	911173	Ξ	MI	1013007				System S
ferminal													Cameras
nal is	2	V	GPS	Ξ	∇	GPS		∇	GPS				Camera
Baud Rate		×	115200	\equiv	\bigtriangledown	115200	. Ξ	∇	115200				
GPS Receiver		~	Applanix	Ξ	\bigtriangledown	Applanix	Ξ	∇	Applanix	=			× Show

4. Tap Close.

