8.7.5 Data

Network	Data		Antuo I V		
Wifi	Routing Config		Aptus LA		
Phone/PABX	Routing Policy Satellite C	Only 👻	Enable	\checkmark	
> Data 1	Apply		Internal IP		
SMS			Link	All	-
Satellite Data Service Profile	Port/Protocol Forwarding	+	Specifier	Port Forwarding	-
Service User Group			Protocol	TCP	*
Traffic Flow Template			Internal Port		
			External Port		
				Cancel Update	

No.	Item	Description
1	Data	Sets the data settings.
	Pouting Config	Selects the data route type (None, Satellite Only, WAN Only).
	Routing Comig	Click the Apply button to apply the settings to the system.
		Displays the port/protocol forwarding list.
3	Port/Protocol Forwarding	 Plus icon: To create new ports, click the plus icon. Then the pop-up window is opened. Enter the details, then click the Update button. The created ports are displayed on the list. Enable: Select the check box. Internal IP: Enter the internal IP. Link: Select the link from the drop-down list. Specifier: Select the specifier from the drop-down list. Protocol: Select the protocol from the drop-down list. Internal Port: Enter the internal port. External Port:Enter the external port.

8.7.6 Satellite

Vetwork	Satellite			
2	Select Satellite			
Firewall				
Data	Auto			Apply
Satellite	MEAS	Elevation: 12	Azimuth: 252	Apply
SMS				
Satellite Data	APAC	Elevation: 43	Azimuth: 154	Apply
Service Profile	EMEA	Elevation: 0	Azimuth: 277	
Device Classification				
	AMER	Elevation: 0	Azimuth: 58	
Advanced SIM External GPIO Restricted Dialing	Tracking Status	Tracking		
Advanced SIM External GPIO Restricted Dialing	Tracking Status Antenna Status Satellite	Tracking		
Iraffic How Template Advanced SIM External GPIO Restricted Dialing Multi Voice NSD	Tracking Status Antenna Status Satellite	Tracking APAC		
Traffic Flow Template Advanced SIM External GPIO Restricted Dialing Multi Voice NSD MST	Tracking Status Antenna Status Satellite	Tracking APAC	Signal	
Traffic Flow Template Advanced SIM External GPIO Restricted Dialing Multi Voice NSD MST	Tracking Status Antenna Status Satellite	Tracking APAC	Signal	
Trathe How Template Advanced SIM External OPIO Restricted Dialing Multi Voice NSD MST	I Tracking Status Anterna Status Satellite	Tracking APAC	Signal	
Trattic How Template Advanced SIM External GPIO Restricted Dialing Multi Voice NSD MST	1 Tracking Status Antenna Status Satellite	Tracking APAC	Signal	
Trattic How Template Advanced SIM External GPIO Restricted Daling Mutt Voice NSD MST	I Tracking Status Antenna Status Satellite 0 40	Tracking APAC	Signal	
Trattic How Template Advanced SIM External GPIO Restricted Dialing Multi Voice NSD MST	I Tracking Status Anterna Status Satellite 60 40 20	Tracking APAC	Signal	
Irathe How Lemplate Advanced SIM External GPIO Restricted Dialing Multi Voice NSD MST	I Tracking Status Antenna Status Satellite 80 40 20 20 30 2014 00205	Tacking APAC	Signal	010256 010020 01000

No.	Item	Description
1	Satellite	By default, the terminal is set up to automatically find the most appropriate satellite to connect to ("Auto" mode). However, if you are located in an area with more than one BGAN satellite available, you can select the satellite you prefer to use when registering on the BGAN network.
		Select the satellite you prefer to use.
		If you select Auto (the default setting) the Aptus LX System automatically uses the most appropriate satellite.
2	Select Satellite	If you have selected a satellite your Aptus LX system will only try to establish a connection to the selected satellite. This means that if the antenna is outside the coverage area for that satellite, the Aptus LX system will not be able to register with the BGAN network.
		Click the Apply button to apply the settings to the system. The AptusLX terminates all ongoing connections and deregisters from the current satellite before it registers on the new satellite (or If you have any ongoing calls or data sessions, they will be terminated when you click the Apply button.)
		When a satellite is selected, the antenna status is changed from Seeking Status to Tracking Status.
3	Tracking Status	Seeking Status: The antenna is searching for the BGAN signal.
		Tracking Status: The antenna has found and locked to the BGAN signal. The antenna is now tracking the BGAN signal. The blue line shows Signal Strength (dBHz) and the green line shows Signal Quality Scores.

8.7.7 SMS

Network	SMS		
Firewall	2 SMS Inbox 3 SMS Outbox		
Phone/PABX	4 SMS Inbox List (0/20)		Delete All SMS Inbox
Satellite	Sender Date	Message	
> SMS		No SMS	
Service Profile			
Device Classification		items per pa	pe: 10 • 0010 < >
Traffic Flow Template			

No.	Item	Description
1	SMS	The BGAN system provides a Short Messaging Service (SMS) for sending and receiving SMS messages (Standard 3G, up to 160 characters per SMS) to and from the terminal.
2	SMS Inbox	All received SMS messages are stored in the inbox. Unread messages are marked with a New icon.
		Click Delete ALL SMS Inbox to delete all messages in the Inbox.
3	SMS Outbox	All sent messages are stored in the outbox. If sending is successful, it is displayed as Success, and if it is unsuccessful, it is displayed as Fail. You can click the recipent number to re-send the message.
		Click Delete ALL SMS Outbox to delete all messages in the Inbox.
4	SMS Inbox/ Outbox List	Click the number in the Inbox / Outbox list, a pop-up window will appear for sending SMS. Also, you can send SMS by clicking the letter icon at the bottom right of the dashboard page.

8.7.8 Service Profile

Network	Service	Profile						
Eirowall 2	Profile I	list						
Phone/PABX Data	Name	Traffic Class	Max Bitrate Downlink	Max Bitrate Uplink	Guaranteed Bitrate Downlink	Guaranteed Bitrate Uplink	Limit Data	
Satellite	Default	Background	256	256	0	0	0	/
🗅 Satellite Data	Strm8	Streaming	8	8	8	8	0	/
> Service Profile	Strm16	Streaming	16	16	16	16	0	1
Device Classification	Strm32	Streaming	32	32	32	32	0	1
Advanced	Strm64	Streaming	64	64	64	64	0	1
SIM External GPI0	Strm128	Streaming	128	128	128	128	0	1
Restricted Dialing	User_1	Background	0	0	0	0	0	1
Multi Voice NSD	User_2	Background	0	0	0	0	0	1
MST	User_3	Background	0	0	0	0	0	1

Name	Default
Traffic Class	Background
Max Bitrate Downlink	256
Max Bitrate Uplink	256
Guranteed Bitrate Downlink	0
Guranteed Bitrate Uplink	0
Limit Data	0
Use Usim Default APN	Enable Disable
User Defined APN	

No.	Item	Description
1	Service Profile	A profile is a collection of Quality of Service (QoS) settings and other settings defining the mode in which data is transmitted on an interface. For example, a profile is used to define whether a connection should be a Standard or Streaming connection.
		You can select between a number of predefined profiles or define your own profiles for your data transmission.
		Displays service profile list and information.
		When you set up a network user group, you select the profiles to use for that network user group. You select a Primary profile and optionally one Secondary profile.
		 Edit button: to edit the profile, click the edit button. Then the pop-up window is opened. Enter the details, then click the Update button. Name: displays the name of profile.
		- Traffic Class: Select the Traffic class from the drop-down list.
		NOTE: For best performance, choose the right traffic class for your
		application. In general, Standard IP (Background) is best suited for TCP/ IP applications, and Streaming IP is best suited for UDP traffic, e.g. live video or audio.
		Subscribed: this function is not available.
		Conversational: this function is not available.
2	Profile List	 Streaming: is real-time one-way communication. It is primarily used for video and audio.
		Interactive: this function is not available.
		 Background: Is used for data which is not delay-sensitive, such as Email SMS, download of databases and reception of measurement records
		 Max Bitrate Downlink: Select the maximum download bit rate allowed for this profile from the drop-down list.
		 Max Bitrate Uplink: Select the maximum upload bit rate allowed for this profile from the drop-down list.
		- Guranteed Bitrate Downlink: Select the guaranteed download bit rate
		needed for this profile from the drop-down list.
		 Guranteed Bitrate Uplink: Select guaranteed upload bit rate needed for this profile from the drop down list
		unis prome from the drop-down list.
		connected data session.
		In background: 1~1000000 Mbytes (0: unlimited)
		In streaming: 1 ~ 43200 minutes (0: unlimited)

No.	Item	Description
2	Profile List	 Use Usim Default APN: Set whether to use the default APN value of USIM or not (Enable/Disable). The APN is taken from the SIM card. This is the recommended option, unless you have special requirements. Use Defined APN: When you want to use a user-defined APN value, enter the APN value. APNs are provided from the Airtime Provider.

8.7.9 Service User Group

Network	Service User Group					
Wifi 2	Service User Group List					
Firewall Phone/PABX	Name	Status	Primary Profile	Secondary Profile	Target Service	
Data Satellite	G2_Default AUTO	Enable	Default		Data only	1
SMS	G5_DataCustom	Enable	User_1		Data only	1
Satellite Data Service Profile	G6_DataStream	Enable	Strm128		Data only	1
> Service User Group Device Classification	G7_DataSecondary	Enable	Default	Strm32	Data only	1
Traffic Flow Template	G8_DataUser1	Disable	User_1		Data only	1
3 Advanced SIM	G9_DataUser2	Disable	User_1		Data only	1
External GPIO Restricted Dialing	G10_DataUser3	Disable	User_2		Data only	1
Multi Voice	G11_DataUser4	Disable	User_2		Data only	1

Auto Activation	
-	Enable Disable
Primary Profile	efault
Secondary Profile	lone

No.	Item	Description
① Service User Group		The system can be organized in service user groups with different setup and different access rights. Each service user group has a service profile that determines how the users connect to the Inmarsat BGAN network. The network user groups can allow or restrict certain services for different users. NOTE: For F4-A250-S, the maximum Streaming bit rate is 128 kbps.
2	Service User Group List	 Displays service user group list and information. Edit button: to edit the profile, click the edit button. Then the pop-up window is opened. Enter the details, then click the Update button. Name: Enter the name of service user group. Auto Activation: Set whether to use this group automatically or not (Enable/Disable). Primary Profile: Select the target primary profile from the drop-down list. This profile is used by this service user group as a first choice, when possible. Secondary Profile: Select the target secondary profile from the drop-down list.

8.7.10 Device Classification

Network	Device Classification			
Wifi	Device Classification List			
Firewall				1
Phone/PABX	Alias	Mac Address	Service User Group	
Data				
Satellite	testlaptop	00:E0:4C:36:79:54	G2_Default(2)	/
SMS	man alcate	09.00.07.75.40.00	CC DataStream(6)	
□ Satellite Data	mypc_ubuntu	05:00:27:75:40:90	G6_DataStream(6)	
Service Profile				
Service User Group				
> Device Classification				

Alias	
Mac Address	
Service User Group	

No.	Item	Description
1	Device Classification	Register the MAC address of the device for using the data service, and assign a service user group to the device.
		Displays device classification list and information.
2	Device Classification List	 Edit button: to edit the profile, click the edit button. Then the pop-up window is opened. Enter the details, then click the Update button. Click Delete button to delete it in the list. Alias: Enter the device name for the data service. Mac Address: Enter the mac address. Service User Group: Select the service user group from the drop-down list.

8.7.11 Traffic Flow Template (TFT)

Network	Traffic Flow	Template								
Wifi	Uplink TFT L	ist								
Firewall Phone/PABX Data	Packet Filter Identifier	Target Route Service Profile	Remote Address	Subnet	Protocol Number	Source port Range	Destination Port Range	Type of Service	Type of Service Mask	
Satellite	1	None			255	0~0	0~0			/
SMS	2	None			255	0~0	0~0			
Service Profile										1
Service User Group	3	None			255	0~0	0~0			1
Device Classification > Traffic Flow Template	4	None			255	0~0	0~0			/
SIM External GPIO Restricted Dialing	Downlink TF Packet Filter Identifier	T List Target Route Service Profile	Remote Address	Subnet	Protocol Number	Source port Range	Destination Port Range	Type of Service	Type of Service Mask	
Multi Voice NSD	1	None			255	0~0	0~0			/
MST	2	None			255	0~0	0~0			1
	3	None			255	0~0	0~0			1
	4	None			255	0~0	0~0			1
	5	None			255	0~0	0~0			1
	6	None			255	0~0	0~0			/
	7	None			255	0~0	0~0			1
	8	None			255	0~0	0~0			1

Aptus LX	
Packet Filter Identifier	1
Target Route Service Profile	
Remote Address	
Subnet Mask	
Protocol Number	255
Source Port Range	0
	0
Destination Port Range	0
	0
Type of Service	
Type of Service Mask	
	Cancel Undate

No.	Item	Description		
		Traffic Flow Template (TFT) is to assign different priorities to different types of traffic in order to optimize performance.		
1	Traffic Flow Template	When more than one type of traffic is needed, you must use both a primary and a secondary profile. For the BGAN core network and the terminal to classify packets received from the external network into the proper profile, you need a traffic flow filter.		
		When using a secondary profile, assign that the system transmits/receives by filtering traffic for specific addresses, protocols, and ports.		
2	Uplink/Downlink TFT List	 Displays Uplink/Downlink TFT list and information. Edit button: to edit the profile, click the edit button. Then the pop-up window is opened. Enter the details, then click the Update button. Packet Filter Identifier: Displays the filter ID. Target Route Service Profile: Select the target route service frofile from the drop-down list. Remote Address: Enter the remote address. (for Downlink TFT: source address, for Uplink TFT: target address) Subnet Mask: This is an IPv4 IP address and subnet mask. Protocol Number: This number is uniquely assigned for the protocol being used. TCP is set to 6, and UDP is set to 17. The protocol number determines which protocol is used by the traffic flow filter. Source Port Range: Enter from and to. Type of Service /Type of Service (TOS) is an 8-bit field in a packet beader with associated mask, that is used to define Quality of Service 		

8.7.12 SIM

Network	SIM		
Wifi	2 Require PIN		
Phone/PABX	Require PIN on startup	O Enable	Disable
Data	PIN		Ø
Satellite			
SMS			
🗀 Satellite Data			
Service Profile	3 Change PIN		
Service User Group	Old PIN		Q
Traffic Flow Template	New PIN		Q
C Advanced	Confirm new PIN		Ø
> SIM		Apply	
External GPIO		мрру	

No.	Item	Description
1	SIM	Sets the use of a PIN to access the terminal.
		Select Enable or Disable to use a PIN.
		 Enable: You must enter a PIN before you can change settings or make calls or data sessions.
(2)	Require PIN	• Disable: You can access and use the terminal without entering a PIN.
		Click the Apply button to apply the settings to the system. The new PIN settings will take effect at next power on.
		Changes the PIN used to access the terminal.
		Old PIN: Type in the Old PIN.
0	Chango BIN	New PIN: Type in the New PIN and retype.
9	Change Fin	Confirm New PIN: Retype in the New PIN.
		Click the Apply button to apply the settings to the system. The new PIN settings will take effect at next power on.

8.7.13 External GPIO

Network	External GPIO	
Wifi		
Firewall	9	
Phone/PABX	Input 1	Satellite Data Prevention 👻
Data	Input 2	Force Prevent RF Activity
Satellite	3 Outputs	
SMS	Output 1	Incomming Call Alarm
🗅 Satellite Data 🚺	Output 2	Data Grandation indication
Service Profile	Output 2	Data Connection Indication *
Service User Group	Output 3	System Event Indication 🔹
Device Classification		Apply
Traffic Flow Template		
Advanced		

No.	Item	Description
1	External GPIO	Select the external General Purpose Inputs/Outputs (GPIO) settings from the drop-down list.
2	Inputs	Select the input settings from the drop-down list.
3	Outputs	Select the outputs settings from the drop-down list.

8.7.14 Restricted Dialing



AptusLX		
Restricted Dialing		
	Cancel	

No.	Item	Description		
1	Restricted Dialing	Set up the terminal for restricted dialing.		
0	Restricted	Set whether to use restricted dialing or not (Enable/Disable).		
	Dialing	Click the Apply button to apply the settings to the system.		
		Displays the restricted dialing list.		
	Restricted Dialing List	 Plus icon: To create a new restricted dialing rule, click the plus icon. Then the pop-up window is opened. Enter the allowed numbers or masks in the entry box. The numbers or masks must be max. 32 digits. The masks may start or end with + that positions the first or last part of a phone number, and it covers all numbers. No other special characters are allowed. See th example below. 		
		Mask (+)	Numbers Accepted	
(3)		+123456789	Any number ending with 123456789 ex) 00123456789	
		123456789+	Any number starting with 123456789 ex) 12345678900	
		+123456789+	Any number including 123456789 in the middle ex) 0012345678900	
		Click the Update buttor	n. The created dialing rule is displayed on the list.	
4	Extension Status	Set whether outgoing calls of each extension should be limited to the numbers or not (Enable/Disable).		

8.7.15 Multi Voice

Network	Multi Voice
Wifi	1 Multi Voice
Firewall	Enable
Phone/PABX	Enable Enable
Data	APN bgan.inmarsat.com
Satellite	
SMS	3 Line 2
🗀 Satellite Data	Add Line
Service Profile	
Service User Group	
Device Classification	
Traffic Flow Template	
D Advanced	
SIM	
External GPI0	
Bestricted Dialing	
Multi Voice	
NSD	
NOT	
MSI	

No.	Item	Description
1	Multi Voice	Normally, the BGAN system only supports one call at a time per FB system. If you wish to have more simultaneous voice calls, you can add multi-voice to your airtime subscription.
		Sets the multi-voice service funcion.
2	Multi Voice	Activate: Sets the multi-voice service by toggling the activation button (Enable/Disable).
		• APN: The VoIP APN used for Multi-voice automatically appears in the APN field. You can type in another APN if necessary. You find the Multi-voice APN name in your subscription documentation.
		Add voice service line by clicking Add Line button.
3	Line	When you subscribe to the optional Multivoice service and enable it in your system, you can have up to 9 concurrent calls.

8.7.16 NSD

Network	NSD	
Wifi	Network Service Device	
Firewall	Terminal Tuna	
Phone/PABX	reminal type	lerminal #1
Data		Apply
Satellite		
SMS		
🗀 Satellite Data		
Service Profile		
Service User Group		
Device Classification		
Traffic Flow Template		
Advanced		
SIM		
External GPIO		
Restricted Dialing		
Multi Voice		
> NSD		
MST		

No.	Item	Description
1	NSD	A Network Service Device (NSD) is an Ehernet hardware device, identified by its unique MAC address. When a network device with dynamic IP address is connected to the terminal, it is automatically listed in the Terminal Type list.
2	Network Service Device	Select the terminal type from the drop-down list. Click the Apply button to apply the settings to the system.

8.7.17 MST

Network	MST	
Wifi 🥑	Maritime Safety Terminal	
Firewall		Enable
Phone/PABX	MST Connection	Enable
Data	Listening port in FB terminal's JS	SON-RPC
Satellite	Server	8545
SMS	Client	8545
🗀 Satellite Data		Apply
Service Profile		1.446.13
Service User Group		
Device Classification		
Traffic Flow Template		
C Advanced	·	
SIM		
External GPIO		
Restricted Dialing		
Multi Voice		
NSD		
→ MST 1		

No.	Item	Description	
1	MST	Sets the Maritime Service Terminal (MST).	
2	Maritime Service Terminal	Sets the maritime service funcion.	
		• MST Connection: Sets the maritime service by toggling the activation button (Enable/Disable).	
		Server: Enter the server ID.	
		Client: Enter the client ID.	

8.8 Tools

This menu sets and displays the Software Upgrade, Backup & Restore, Reset, Logs, Diagnostic, and Support function.

8.8.1 Software Upgrade



No.	Item	Description
1	Software Upgrade	Upgrades antenna software firmware.
2	Config	Browse and select the package firmware file to upload and click the Upload button. The update may take a few minutes to complete. The upload time may vary due to a variety of factors such as the speeds of your network. Uploading an incorrect firmware file may cause serious damage to your antenna and BDU. Refer to the following "Package Update Procedures" page for more details.

Package Update Procedures:

1. Browse and select the upgrade package file to upload. Click on the **Upload** button to transfer the Firmware package file (*.bin) to the BDU module.



2. The antenna firmware state will appear in the pop-up window. Check the current version and the new version. Click the **Upgrade** button.



3. During the upgrade process, the window will display process status.

Name	Progress	Status
J	29%	Running
dem	100%	Success
:kage	0%	Idle

4. If the firmware is successfully upgraded, it will display as **Success**. Click the **Done** button to close the pop-up window.



8.8.2 Backup & Restore



No.	Item	Description
1	Backup & Restore	Backs up user configuration files to PC and Restores the antenna settings.
2	Backup	Saves user configuration files to PC. Click the Backup button to apply the settings to the system.
3	Restore	Restores the antenna setting by using the setting files saved from the PC. Click the Restore button to apply the settings to the system.

8.8.3 Reset

Software Upgrade	Reset	
Backup & Restore	2 I Reset	
Logs	Reset	
Diagnostic		
Support	3 L Factory Reset	
	Factory Reset	
	_	

No.	Item	Description
1	Reset	Resets the antenna system and factory reset.
2	Reset	Click the Reset button to reset the antenna system. The user configuration is not reinitialized.
3	Factory Reset	Click the Factory Reset button to initialize the antenna system. The user configuration is initialized.

8.8.4 Logs

Software Upgrade	Logs
Backup & Restore	Log Download
> Logs	9/4/2020 Download Log File
Diagnostic	
Support	

No.	Item	Description
1	Logs	Downloads the antenna log data.
		Displays the antenna log list.
2	Logs	 Download Log File: Any log data (.gz) within a month can be downloaded. Click the Download Log File button.

8.8.5 Diagnostic

Software Upgrade	Diagnostic				
Backup & Restore	H/W Test Mode Activate				
Logs	Operation Mode	Acti	ive		
> Diagnostic					
Support	Self Test				
e e					
	Start				
4	Self Test Result				
			No Test Re	sult	
	ADU Diagnostic		_		
	Test	Result		Reason	
	Comms	Idle	-		
	MU Sensor	Idle			
	AZ Motor	Idle			
	 EL Motor 	Idle			
	MPU Temperature	Idle			
	FEM Temperature	Idle			
	MoCA PHY	Idle			
	MPU PHY	Idle			
	Modem PHY	Idle			
		Start			

No.	Item	Description
1	Diagnostic Executes antenna diagnosis test to check the antenna status.	
2	 H/W (Hardware) Test Mode Activate Sets the hardware test function by toggling the activation button (Active) 	
0	Solf Toot	The activation button must be selected to the "Active" in the previous step.
	Sell lest	Click the Start button to run the self-test.
Self Test Result Displays the self-test result.		Displays the self-test result.
		Executes the ADU diagnosis test to check each part of ADU status.
5	ADU Diagnostic	Select the ADU part to test by toggling the activation button (Enable/Disable).
		Click the Start button to run the test.



WARNING

While selecting the **Active** button in the H/W Test Mode Activate menu, the system is in the hardware test mode. Select the **Inactive** button for normal operation.

Diagnosis Procedures:

1. Select the checkbox (full diagnosis test or single diagnosis test) before modifying the settings. Click on the **Start** button to run the diagnostic test.

DASHBOARD	INSTALL WIZ. TOOLS TROUBLESHOOTING SETUP	to 5 U B D Detus Restert Reboot Dave Det. Art info
Diagnosis	Diagnosis	-
Antenna Log	Dispessie 0	2
Antenna Event Log	Select All Clear Select	View Last Result Start
Support	Comm. Test	
	Sensor Test	
	AZ Anis	
	EL Avis	
	CL Axis	
	LNB/NBD	
	Skew	
	Antenna Power	
	ACU Power	

2. Once the diagnosis starts, the page will indicate test status. It should take a few minutes to complete the test.

APTUS NX		
Diagnos	is Type Result	Â
PASSED	Comm. Test	^
RSSI Value Test [Warning] value Please check th	0 / range: -2080 connection status of each kind of cable.	
FAILED	Sensor Test	~
TESTING	AZ Axis	~
ON INIT	EL Axis	~
ON INIT	CL Axis	~
ON INIT	LNB/NBD	~
ON INIT	Skew	~
ON INIT	Antenna Power	~
ON INIT	ACU Power	× .
		Ok

3. After the diagnosis is completed the system shows the diagnosis results of each item. You can save the results to the BDU by clicking the **Save Report** button and print this page by clicking the **Print** button.



4. When you want to check the recently saved diagnosis results, click the **View Last Report** button. The pop-up page of the diagnosis results, including the save date and time, will appear. You can print this page by clicking the **Print** button.

DASHBOARD INSTALL	WIZ. TOOLS	TROUBLESHOOTING	SETUP	0 bette	5 Notest	() Neboot	an be	Ant. Info
Diagnosis	Diagnosis							
Antenna Log	Diagnosis (0							
Antenna Event Log	Select All	Clear Select			View	ast Res	ut	Start
Support	🗸 Comm. Test							
	Sensor Test							
Antus NX				×				
				A .				
Diagnosis Result								
date: Fri, 05 Oct 2018 11:44	RS6 GMT							
PASSED Comm. Test								
RSSI Value Test	Ner .2080							
Please check the connect	tion status of each ki	nd of cable.		- 1				
PASSED Antenna Power	r			- 1				
Antenna Input Power								
[Passed] value: 44.5 / th	reshold: 40							
Sensor Board Power								
[Passed] value: 7 / thres	hold: 5							
Skew Board Power	shald an							
[Passed] value: 24 / thre	shold: 20							
IPassaril value: 44.1 / th	reshold: 40							
[man] man in []				- 1				
PASSED ACU Power								
Drint				Clore				
				cione				

No.	Item	Description			
		Displays the diagnosis code.			
		Code	Test		
		101	The data communication between the antenna and the BDU is tested.		
		102	The azimuth axis is tested.		
		103	The elevation axis is tested.		
		104	The cross-level axis is tested.		
		105	Not Available		
		106	Not Available		
1	Diagnosis Code	107	The rate sensor is tested.		
		108	Not Available		
		109	Not Available		
		110	The LNB / NBD is tested.		
		111	The LNB pol motor is tested.		
		112	Not Available		
		113	The antenna power is tested.		
		114	The BDU power is tested.		
		115	Not Available		
		116	The home sensor is tested.		
		• An ex	cample of diagnosis result:		
		1			
		- '-':	The test was passed.		
(2)	Diagnosis Result	Code	e 102, 103, 104 and 111 were passed.		
		- Last	1 or 2 digits of diagnosis code : The test was failed.		
			The test was not performed		
		- Code	e 105, 106, 108, 109, 112, 115 and 116 were not performed.		

8.8.6 Support

Software Upgrade	Support
Backup & Restore	
Reset	
Logs	Download
Diagnostic	
> Support	

No.	Item	Description
1	Support	Downloads the User Guide.
2	Manual	The user guide file (.pdf) can be downloaded. Click the Download button.

Chapter 9. Specification

9.1 Technical Specification

Above Decks Unit (ADU)					
ADU Height		295 mm (11.6 ⁻	1")		
ADU Diameter		Ø291 mm (11.45")			
ADU Weight		4.5 kg (9.92 lbs) (TBD)			
Dv	Frequency	1518.0 ~ 1559	.0 MHz L-Band		
rx .	Gain	10.8 dB			
Ти	Frequency	1626.5 ~ 1675	.0 MHz L-Band		
IX	Gain	11.3 dB			
RF Output power		34.1 dBm			
Polarization		RHCP (Rx and	l Tx)		
G/T		-15.5 dB/K			
EIRP		15.1 dBW			
Axial Ratio		<4 dB			
Antenna Motion		-25 ~ 115°			
	Roll	± 30° / 4 s			
	Pitch	± 15° / 3 s			
Ship's Motion	Yaw	± 10° / 5 s			
	Turning Rate	36°/sec and 12°/s ²			
	Headway	30 knots			
GNSS		GPS, GLONAS	SS, Galileo		
ADU to BDU Cable (A	ntenna Cable)	Single RF Cab	le		
Input Power		48 V DC supp	lied from BDU over RF Cable		
Below Decks Unit (B	BDU)				
BDU Size		315 x 190 x 42 mm (12.4" x 7.48" x 1.655")			
BDU Weight		1.5 kg (3.3 lbs) (Stand-alone Type)		
LED Indicator		3 LEDs for Power, Tracking, Event			
		802.11 b/g			
		Frequency : 24	400 MHz - 2483.5 MHz		
Wi-Fi		Output Power	: below 30 dBm (10 mW/MHz in Korea,		
		Japan)			
	1 ap. OFF Duch Duch two	Max. Antenna	gain: 2 dBi		
SIM	structure		User Authentication		
Ethernet	4 ea, RJ45 Female		TCP/ IP Connection, including 2 Port PoE		
RF Interface	1 ea, TNC Female		Sub-System Connection to ADU		
Analog	1 ea, RJ14 Female		Analog Phone		

GPIO	1 ea, (10 pins)	General Purpose I/O
Wi-Fi	1 ea, SMA Female	External Wi-Fi Antenna
On/Off switch	1 ea, Power Switch	System Power Switch
Reset	1 ea	System Reset
Ground	1 ea	Grounding
BDU Power Input	10.8 ~ 30 V DC, 120 W	

9.2 Environmental Specification

Test	Intellian Standard		
Temperature (ADU)	Operational	IEC-60945 (-25°C to +55°C / Power On)	
	Survival	IEC-60945 (-40°C to +80°C / Powered On and a non- functional state)	
	Storage	IEC-60945 (-40°C to +85°C / Power off)	
Temperature (BDU)	Operational	IEC-60945 (-25°C to +55°C)	
	Survival	IEC-60945 (-40°C to +80°C)	
	Storage	IEC-60945 (-40°C to +85°C)	
Humidity	IEC-60068-2-30		
	Upper test Temp.: +40°C (-3), Humidity 98%		
	Lower test Temp.: +15°C (+3), Humidity 71% ~ 78%		
Vibration	Operational	IEC-60945	
		Random 1.05 g RMS	
	Survival	IEC-60721-3-6 Class 6M3	
		Random 1.7 g RMS	
Shock (ADU)	Operational	Half sine, 20g / 11ms	
Shock (BDU)	Operational	IEC-60068-2-27	
		10g/11ms, 20g/7ms	
	Survival (Transient)	IEC-60721-3-6 Class 6M3	
		(10g/11ms, 30g/6ms, 50g/3ms)	
	Survival (Bump)	IEC-60721-3-6 Class 6M3	
		(25g/6ms)	
Salt Mist	Saline solution: 5% NaCl, PH 6.5 to 7.2 at $20^{\circ}C \pm 2^{\circ}C$		
	Storage period: 7 Days (IEC-60945)		
Wind Load	200 km/hr		
Ingress Rating (ADU)	IP56 (Water Proofing: IEC-60529)		

Chapter 10. Warranty

10.1 Warranty Policy

Intellian systems are warranted against defects in parts and workmanship, these warranties cover THREE (3) YEAR of parts and TWO (2) YEAR of factory repair labor to return the system to its original operational specification.

Warranty periods commence from the date of shipment from Intellian facility, or date of installation which is come sooner. Providing maximum 6 months Warranty additionally if submission of authorized form which is described installation occurs within 6 months from the shipment date.

Intellian Technologies warranty does not apply to product that has been damaged and subjected to accident, abuse, misuse, non-authorized modification, incorrect and/or non-authorized service, or to a product on which the serial number has been altered, mutilated or removed. Intellian Technologies, will (at its sole discretion) repair or replace during the warranty period any product which is proven to be defective in materials or workmanship, in accordance with the relevant product warranty policy. All products returned to Intellian Technologies, during the warranty period must be accompanied by a Service Case reference number issued by the dealer/distributor from Intellian Technologies, and (where applicable) a copy of the purchase receipt as a proof of purchase date, prior to shipment. Alternatively, you may bring the product to an authorized Intellian Technologies, dealer/distributor for repair.

Chapter 11. Appendix

11.1 Appendix A. Tightening Torque Specification

The material qualities of screws are standardized. Refer to the tightening torque N-m according to ISO 898/1.

Polt Size	Tightening Torque (N-m)		
DOIL SIZE	A2-70 (6.8)	A4-80 (8.8)	
M4	1.5	2	
M5	3	4	
M6	5.1	6.8	
M8	12.2	16.6	
M10	25.2	33.1	
M12	43.9	58.3	
M16	114	139	

(Example Picture)