1 Hughes Ballast Calculator

The purpose of this document is to describe the procedure for downloading, installing, and using the required Hughes Ballast Calculator that will be used on every VSAT installation requiring a NPMM. The download link will be made available May 14th 2017 from the Quick actions section from the installer portal. This will be a stand-alone app that will be installed on the installer's mobile device. This app will be used to determine the correct amount of ballast blocks required for the installation of the NPMM at an individual site based on latitude, longitude, wind exposure, and site elevation.

1.1 Downloading and installing the App from the Installer portal

- 1. Log into the installer portal
- 2. Go to the Quick actions section and select the link

Quick Actions	
View FSO:	GO
View Person:	GO
 Field Trainer Community Hughes Enterprise Install 	NEW NEW
Prequal	
OASIS: OASIS Mobile	App Download (4.00.086 Mar 27th) 😮 You Tube 🔤
BALLAST: Ballast Cald	ulator Mobile App Download (1.0 May 14th 2017)

Ballast Calculator

3. Select the download link for your mobile device type

- 4. During installation you may see a popup warning stating your installation is blocked from unknown sources, you must allow it for this installation.
- 5. Go into your device settings and select "Allow this installation only" and select ok.



8. The Ballast Calculator will need to access your device location to auto populate the sites latitude and longitude.



- 9. Select *Allow* then select *Continue* to launch the application.
- 1.2 Using the App to calculate the ballast requirements
 - 1. Launch the App by selecting the Icon on your smart device.



- 2. Input the installer Name, FSO and Customer name in the appropriate fields.
- 3. Select use GPS to determine your latitude and longitude for the site you will be installing and allow it to auto populate the fields.

Note: The Ballast Calculator can be used without the GPS enabled but requires the manual entry of the sites physical address.

	ime
John Smit	h
Site ID	
SME00012	234
Customer I	Name
Hughes Net	work Systems, LLC
Address	
11717 Explor	ration Ln Germantown, MD 20876 United
✓ Use Devi	ce GPS
	N.)
Latitude (°I	
Latitude (°l 39.178	
Latitude (°I 39.178 Longitude	(°W.)

- 4. Select Next.
- 5. From the drop down menu select the correct size antenna you will be installing at the site.
- 6. Select the size of the mount you will be installing at the site for your antenna.
- 7. Input the height of the building the antenna will be installed on.
- 8. Input the Satellite Location the antenna will be aligned to.

K Back
Antenna Type
74cm 🗸
Mount Type
4'x4' ~
Roof Height (ft)
20
B – Urban or suburban regions
C – Open regions, i.e. grasslands, water surfaces
D – Flat, unobstructed regions, i.e. mud flats, salt flats
Exposure
Brick Weight (lbs)
30
VERIFY

- 9. From the drop down menu select the appropriate wind exposure rating for the location
- 10. Input the weight of the ballast blocks you will be using with the NPMM
- 11. Select Verify

K Back						
11717 Exploration Ln Germantown, MD 20876 United States						
Installer Name	:	John Smith				
Site ID	:	SME0001234				
Customer Name	:	Hughes network Systems				
Address	:	14023 Jump Dr Germantown, MD 20874 United States				
Antenna Type	:	74cm				
Mount Type	:	4'x4'				
Latitude (°N.)	:	39.179				
Longitude (°W.)	:	77.247				
Roof Height (ft)	:	20				
Satellite Location (°)	:	95				
Exposure	:	В				
Brick Weight (lbs)	:	30				
CALCULATE						

- 12. Verify that the information entered is correct and select Calculate
- 13. Using the calculations determine the correct ballast weight and the correct number of ballast blocks required for the site and continue the installation of the NPMM.

Installation Date and Time		10 May 2017 01:47 PM	
Installer Name		W	
Site ID		W	
Customer Name		W	
Address	:	100 Lakeforest Boulevard,Gait hersburg, MD 20877 United States	
Antenna Type	:	74cm	
Mount Type		4'x4'	
Latitude (°N.)	:	39.152	
Longitude (°W.)		77.209	
Roof Height (ft)		20	
Satellite Location (°)		95	

Elevation (°)	:	41.042			
Azimuth (°)	:	206.942			
polarization (°)	:	20.57			
Wind Speed (mph)	:	120			
Brick Weight (lbs)	:	30			
Required Ballast Weight (lbs)	:	199.0			
Number of Ballast Blocks Needed	:	7			
Roof Live Load (Ibs)	:	277.2			
Roof Live Load Pressure (lbs/ft^2)	:	17.32			
Disclaimer					
These results conform to ASCE					

7-10 requirements. Check with local building code authority to see if local building codes exceed ASCE 7-10 requirements.

SAVE AND RESTART

SAVE AND RESTART