

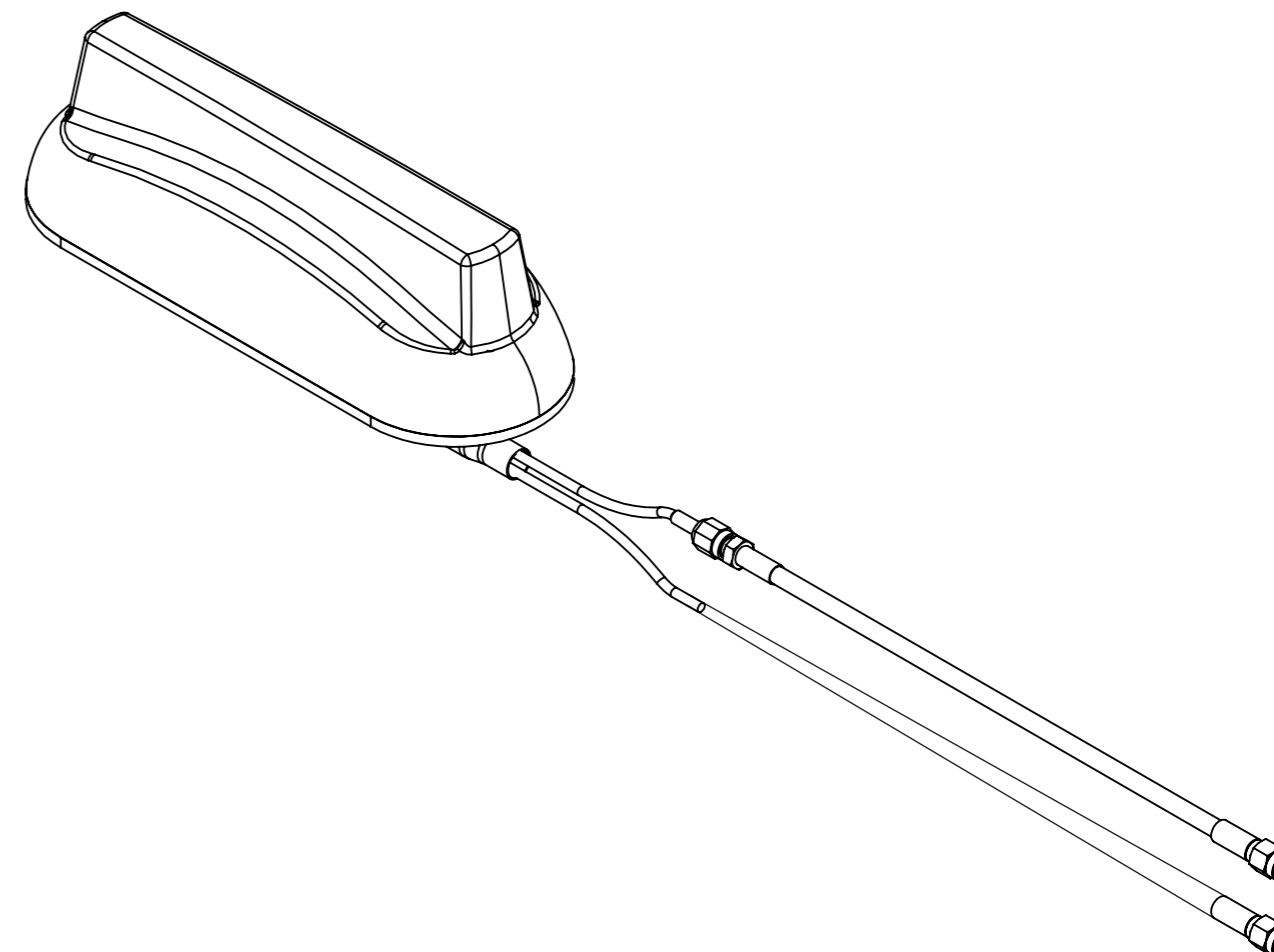
REVISIONS

PARAMETER	SPECIFICATION									
Antenna Model	VFD69383B1NJN-518Q / VFD69383W1NJN-518Q									
Number of Ports	2 (1x- LTE/CELL, 1x- GNSS)									
Port Configuration	1x- 3G/4G/ISM/CBRS (LTE/CELL)									
Frequency Bands, MHz	698- 806	824- 894	880- 960	1690-1880	1850- 1990	1910- 2180	2300-2500	2500-2700	3300-3800	
Peak Gain(*), Avg. dBi	0.9	1.7	1.9	3.9	3.5	2.9	3.9	5.2	5.3	
Peak Gain(*), Max. dBi	1.3	2.0	2.0	4.3	3.8	3.8	5.1	5.5	7.0	
VSWR(**), Avg	1.7	1.6	1.6	1.5	1.4	1.5	1.6	1.5	1.3	
VSWR(**), Max	2.5	2	2	2	2	2.1	2	2	2	
Isolation LTE to GNSS (dB)	-41	-43	-42	-46	-53	-53	-57	-53	-39	
Azimuth 3 dB Beamwidth	360°, Omnidirectional									
Nominal Impedance (Ohms)	50									
Polarization	Linear Vertical									
Max Power/port- Ambient 25°C(W)	30 (LTE/CELL)									

REV	DESCRIPTION	DATE	DWN	APVD
F01	INITIAL RELEASE	3/05/2020	LCT	TER
F02	CHANGE DESIGN & UPDATE SPECIFICATION	3/05/2020	LCT	TER
AA	ADD "IP×9K" IN SPECIFICATION	10/12/2023	IZZ	WTN

- Notes:
- (\*) This parameters is based on 1ft cable length & 1ft ground plane.
  - (\*\*) This parameters is based on 17ft cable length & 1ft ground plane.
  - Antenna specification is subjected to change according to the ground plane size.

GNSS SPECIFICATION			
PARAMETER	SPECIFICATION		
Frequency of Operation (MHz)	1559 - 1606		
Band	BEIDOU	GPS	GLONASS
Frequency Band (MHz)	1561.098 ±2.046	1575.42 ±1.023	1602 ±5
Antenna Gain (dBi)	3.7	4.7	5.6
LNA Gain Typ. @ room temp. (dBi)	28±3		
Noise Figure @ room temp., Max (dB)	≤ 2.5 @ 1575 MHz		
Max VSWR @ room temp.	≤ 2.0		
Polarization	RHCP		
Nominal Impedance	50 Ω		
DC Voltage (Vdc)	3.3		
Operating Supply Voltage (Vdc)	2.5 - 7.0		
Current Consumption, Max @ room temp mA)	20		
Out-of-band Signal Rejection Min @ room temp (dBc)	> 88	> 84	> 86
Input Max Power (dBm)	-33		
Cable Type	RG174		
Cable length, cm	518		
Connector	SMA, Male		



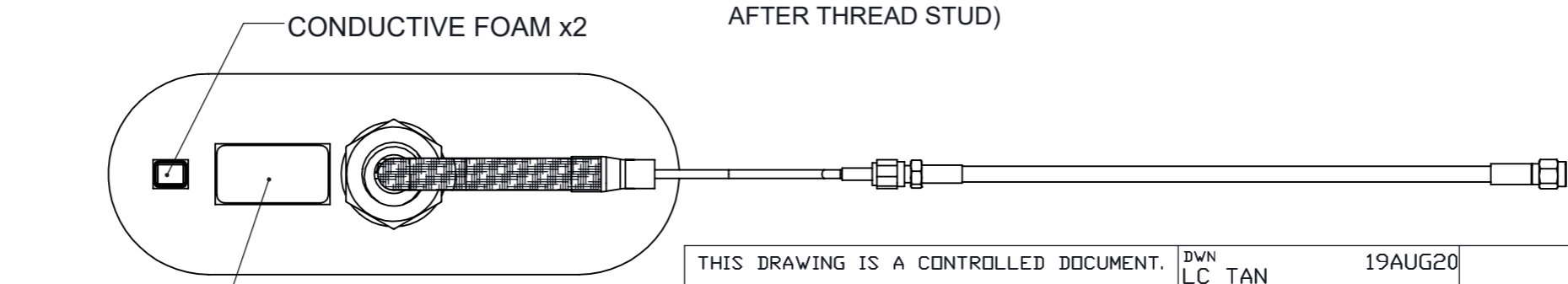
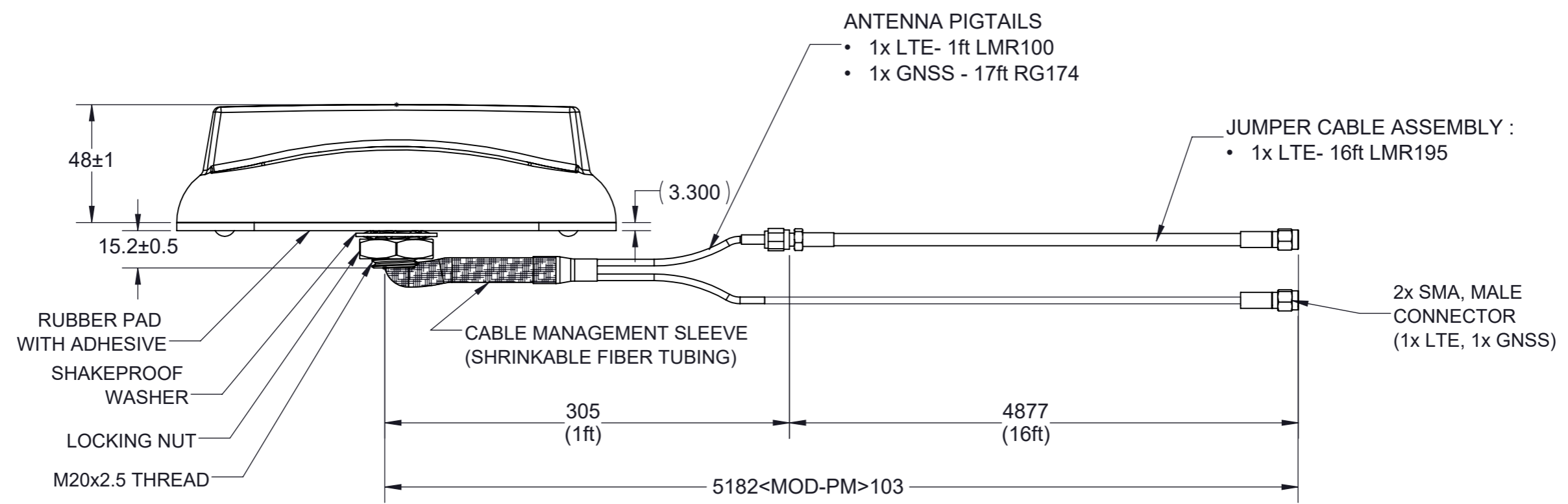
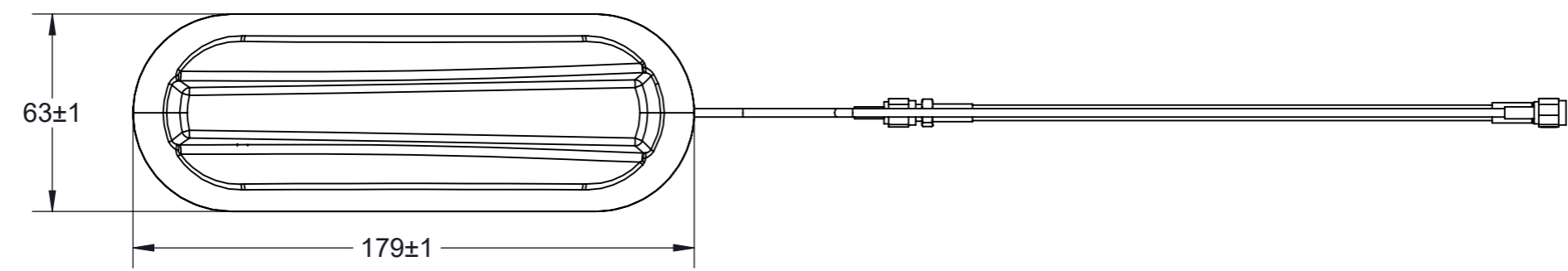
MECHANICAL SPECIFICATIONS	
Dimensions- L x W x H, mm (inches)	179 x 63 x 48 mm (7.04 x 2.48 x 1.69)
Weight, kg (lbs)	0.54 kg (1.2 lbs)
Mounting	P- Mount
Cable Type	LMR 100- pigtails, LMR 195- jumper cables
Color	Black or White
Radome Material	PC, UL94-V0
Baseplate Material	Aluminum

ENVIRONMENTAL SPECIFICATIONS	
Operating Environment	Outdoor Vehicle
Operating Temperature, °C (°F)	-30 to +70 (-22 to +158)
Storage Temperature	-40 to +85 (-40 to +185)
Ingress Protection	IP67 & IP69K
Rail Compliance Standards	EN61373 (Shock & Vibration), EN50155 (Temperature)
Material Substance Compliance	RoHS Compliant

THIS DRAWING IS A CONTROLLED DOCUMENT.		DWN LC TAN 19AUG20		
DIMENSIONS:		CHK TH LEE 19AUG20		
mm		APVD WT NG 19AUG20		
		TOLERANCES UNLESS OTHERWISE SPECIFIED:	NAME	
MATERIAL		0 PLC 0.5	VFD69383x1NJN-518Q	
		1 PLC 0.25	MOUNTING & OUTLINE	
		2 PLC 0.13	SIZE CAGE CODE DRAWING NO RESTRICTED TO	
		3 PLC -	A300779 C-VFD69383X1NJN	
		4 PLC -	SCALE 1:2 SHEET 1 OF 2 REV AA	
		ANGLES 30	CUSTOMER DRAWING	
		FINISH -		
		-		

REVISIONS

REV	DESCRIPTION	DATE	DWN	APVD
-	See Sheet1	-	-	-



THIS DRAWING IS A CONTROLLED DOCUMENT.

DIMENSIONS:		TOLERANCES UNLESS OTHERWISE SPECIFIED:	
mm		0 PLC	0.5
		1 PLC	0.25
		2 PLC	0.13
		3 PLC	-
		4 PLC	-
MATERIAL		FINISH	
-		-	
-		-	

DWN	LC TAN	19AUG20
CHK	TH LEE	19AUG20
APVD	WT NG	19AUG20
PRODUCT SPEC		
APPLICATION SPEC		
WEIGHT -		
CUSTOMER DRAWING		



VFD69383x1NJN-518Q MOUNTING & OUTLINE

SIZE	CAGE CODE	DRAWING NO	RESTRICTED TO
A3	00779	C-VFD69383X1NJN	
SCALE 1:2		SHEET 2 OF 2	REV AA