

812 mm

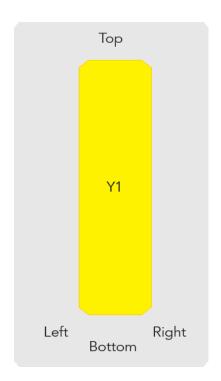
## 6133112E

6133112EN 6133112EG 6133112ENG

2-Port, 33°, XPOL, Panel Antenna, Variable Tilt, 812 mm

- Single band antenna, dual polarisation, 2 connectors
- Independent tilt on each band 2-12°
- MET and RET versions, 3GPP/AISG2.0, in multiple single RET (multiple device type 1) or in Multi-RET (device type 17, with firmware above MD3.10).
- Our patented RET module to control all tilt angles, fully inserted inside the antenna (field replaceable)

>	Frequency Range (MHz)	1710-2690
	Array	Y1
ERVIEV	Connector	1-2
PRODUCT OVERVIEW	Polarization	XPOL
	Azimuth Beamwidth (avg)	33°
	Electrical Downtilt	2-12°
	Dimensions	812 x <358 x <190 mm



#### **ORDERING OPTIONS** Select from the different options listed below

SELECT ELECTRICAL DOWNTILT CONTROL & AISG PROTOCOL	SELECT CONNECTOR TYPE	ANTENNA MODEL NUMBER	
Manual Electrical Tilt (MET)	4.3-10 Female	6133112EN	
Manual Electrical Tilt (MET)	7/16-DIN Female	6133112E	
Remote Electrical Tilt (RET)	4.3-10 Female	6133112ENG	
AISG v2.0 / 3GPP	7/16-DIN Female	6133112EG	

 $<sup>\</sup>hbox{^*Pre-commissioned configuration; Contact Amphenol for further details.}$ 







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Amphenol ANTENNA SOLUTIONS

2-Port, 33°, XPOL, Panel Antenna, Variable Tilt, 812 mm

<b>ELECTRICAL SPECIFICATIONS</b> Ultra Wide Band						
Frequency Range		MHz	1710-2690			
		MHz	1710-1880	1920-2170	2200-2690	
Polarization			± 45°			
Gain	Over all Tilts	dBi	17.5	18.1	18.8	
Azimuth Beamwidth		degrees	35 ± 3.0	33 ± 3.0	30 ± 3.0	
Elevation Beamwidth		degrees	14.1 ± 0.5	12.5 ± 0.5	10.4 ± 0.5	
Electrical Downtilt		degrees	2-12			
Impedance		Ohms	50			
VSWR			< 1.5			
Passive Intermodulation 3rd Order for 2 x 20W Carriers		dBc	< -153			
Front-to-Back Ratio, Total Power, ±30°		dB	> 27	> 27.5	> 28	
Upper Sidelobe Suppression, Peak to 20°		dB	> 16	> 15	> 15	
Maximum Effective Power Per Port		Watts	200			
Inter/Intra Band Isolation		dB	> 27			



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#### **ELECTRICAL DOWNTILT CONTROL**

For multiband antennas, electrical downtilt for each band can be controlled separately.				
Manual Electrical Tilt (MET) Control  The MET is a separate kit provided on the bottom of the antenna. This kit has colored knobs with a respective array identification indicated within it. This knob can be rotated to set an electrical downtilt as per the requirement. The information of the respective arrays can be observed with an indicator provided near the knob.				
Remote Electrical Tilt (RET) Control	The remote control of the electrical tilt is managed by single RET unit inserted in the bottom of the antenna. See details below and refer to the ordering options to see which actuators are available with this particular antenna. A single actuator individually controls the tilt of each band (no need for daisy chain cables between the bands). This module does not add any additional length to the antenna.			

#### **RET ACTUATOR**

Amphenol's **RET-READY** antennas are delivered with the RET Actuator already installed and pre-commissioned with all antenna parameters. Every RET device is factory configured and calibrated so the antenna is ready to be used once delivered to the site which means that there is no need for further installation of RET devices.

Number of RET-READY	Actuators	One per antenna	
Input Voltage		+10 to +30 V	
Power Consumption Idle State		0.5 W	
Operating		4 W typical / 10 W maximum	
Protocol		3GPP/AISG 2.0	
Tilt Change Duration		Less than 15 seconds, typical (may vary dependent on antenna type and outdoor temperature)	
Precision		± 0.5°	
Tilt Change Capability		50,000 minimum	
RET Interface		1 pair of AISG Male and Female (type IEC60130-9)	
Field Replaceable Unit		Yes	



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<b>≱</b> 5	ARRAY	FREQUENCY	CONNECTOR	CONNECTOR TYPE
ARRA	<u></u> Y1	1710-2690	1-2	7/16-DIN Female Long Neck or 4.3-10 Female Long Neck

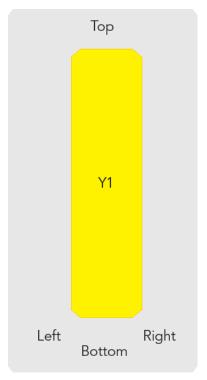


Diagram shown above depicts the view from the front of the antenna. The illustration is not shown to scale.

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### **MECHANICAL SPECIFICATIONS**

REV071123I [Product Candidate]

mm (in) < 358 (14.0)  epth mm (in) < 190 (7.4)  et Weight - Antenna Only kg (lbs) 14 (30.8)  echanical Distance Between Mounting Points mm (in) TBD  perational Wind Speed km/h (mph) 160 (99.4)  ervival Wind Speed km/h (mph) 200 (124)  edome Color Gray RAL7035  edome Material Outdoor Plastic			
epth mm (in) < 190 (7.4)  et Weight - Antenna Only kg (lbs) 14 (30.8)  echanical Distance Between Mounting Points mm (in) TBD  perational Wind Speed km/h (mph) 160 (99.4)  ervival Wind Speed km/h (mph) 200 (124)  edome Color Gray RAL7035  edome Material Outdoor Plastic	Length	mm (in)	812 (32.0)
tet Weight - Antenna Only  kg (lbs)  14 (30.8)  TBD  Derational Wind Speed  km/h (mph)  160 (99.4)  revival Wind Speed  km/h (mph)  200 (124)  dome Color  Gray RAL7035  dome Material  Outdoor Plastic	Width	mm (in)	< 358 (14.0)
echanical Distance Between Mounting Points mm (in) TBD  Derational Wind Speed km/h (mph) 160 (99.4)  Invival Wind Speed km/h (mph) 200 (124)  Indome Color Gray RAL7035  Indome Material Outdoor Plastic	Depth	mm (in)	< 190 (7.4)
	Net Weight - Antenna Only	kg (lbs)	14 (30.8)
km/h (mph)  200 (124)  Idome Color  Gray RAL7035  Idome Material  Outdoor Plastic	Mechanical Distance Between Mounting Points	mm (in)	TBD
dome Color Gray RAL7035  dome Material Outdoor Plastic	Operational Wind Speed	km/h (mph)	160 (99.4)
Idome Material Outdoor Plastic	Survival Wind Speed	km/h (mph)	200 (124)
	Radome Color		Gray RAL7035
ghtning Protection Direct Ground (unless otherwise noted)	Radome Material		Outdoor Plastic
	Lightning Protection		Direct Ground (unless otherwise noted)

Quoted performance parameters are provided to offer typical, peak or range values only and may vary as a result of normal testing, manufacturing and operational conditions. Extreme operational conditions and/or stress on structural supports is beyond our control. Such conditions may result in damage to this product. Improvements to products may be made without notice.



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#### **ENVIRONMENTAL SPECIFICATIONS**

Environmental		ETS 300 019
Operating Temperature	° C (° F)	-40° to +60° (-40° to +140°)
Product Environmental Compliance		Product is RoHs Compliant

### ACCESSORIES All accessories are ordered separately unless otherwise indicated

ITEM	MODEL NUMBER	WEIGHT
Brackets for pole Ø48 to Ø115 mm (Ø1.9 to Ø4.5 in) <i>delivered as standard</i>	0900181/00	3.4 kg (7.5 lbs)
Kit to add mechanical tilt (0° to 10°) to above brackets <i>optional</i>	0900397/00	3.0 kg (6.6 lbs)

Wall mounting brackets are available upon request

#### **INSTALLATION** Please read all installation notes before installing this product.



Always attach the antenna by all mounting points.

Do not install the antenna with the connectors facing upwards.

Do not cut the tethered transparent cap(s) that cover the antenna's tilt adjustment indicators.

In order to operate the RET control, the transparent caps covering the tilt adjustment indicators must be engaged and locked.