



**ANTENNAS™**

# CIRCULAR POLARISED UNDERBELT ANTENNA SlimLine - A6011

## ABOUT TIMES-7

Pushing the boundaries of RFID technology worldwide Times-7 are leaders in RFID antenna design and manufacture. Our patented award winning UHF antennas meet the needs of virtually any industry application; providing customers with fast accurate tracking of products, assets & people; empowering organizations to transform processes & reduce costs.

Our SlimLine range of antennas is unique in the RFID industry; offering high levels of performance & durability in an aesthetically superior form. Proven in a diverse & growing range of markets, applications include retail & customer interaction, conference & people tracking, race timing, baggage handling, and logistic & supply chain asset management.

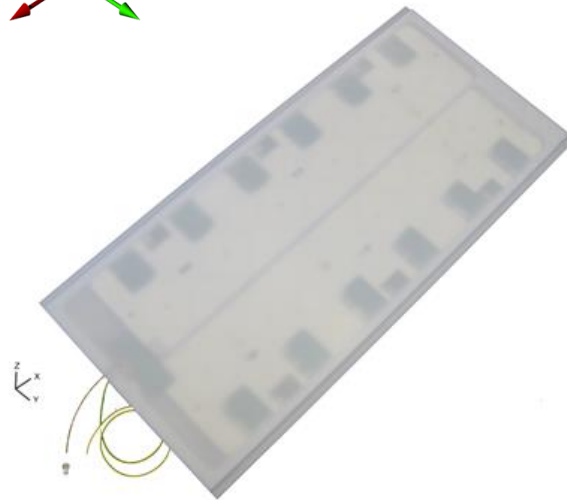
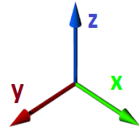
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*The SlimLine A6011*

Ultra-low profile circular polarised antenna

Especially suited for airport conveyor belts

Industry leading accuracy rates

Just 12 mm / 0.5 in. thick

Typical applications:

Airport baggage handling systems  
& any conveyor belt-based application

Part of the SlimLine range of airport antennas, the A6011 is a flat panel antenna array especially suited to conveyor belt-based UHF RFID applications. Encased in an ultra-low profile UHMWPE (Ultra-High Molecular Weight Polyethylene) radome, the A6011 is designed for continuous 24x7 operation in environments where downtime is not an option.

At just 12 mm / 0.5 in. thick, and designed for quick and easy installation, the A6011 is the ideal choice for airport baggage handling systems, or any conveyor belt-based application.

The A6011 underbelt antenna is now available in three different sizes. For more details, please refer to the physical specifications.

### Specifications

#### Physical / Environmental Specifications

	A6011 (1200mm)	A6011 (1000mm)	A6011 (800mm)
Dimensions (L x W x D):	1200 mm x 600 mm x 12 mm 48 in. x 24 in. x 0.5 in.	1000 mm x 800 mm x 12 mm 39 in. x 31 in. x 0.5 in.	800 mm x 800 mm x 12 mm 31 in. x 31 in. x 0.5 in.
Weight:	7 kg / 15.4 lbs.	8.5 kg / 18.7 lbs	8.0 kg / 18.0 lbs
Radome Material:	3 mm UHMWPE (Ultra-High Molecular Weight Polyethylene)		
Environmental Rating:	IP54		
Operating / Storage Temperature:	0° to +50°C / -30° to +60°C +32F° to +122°F / -22° to +140°F		
Mounting:	Affixed directly onto conveyor frame (under conveyor belt)		
Connector type / position:	SMA female side fly lead (300 mm / 11.8 in.)		

#### Electrical Specifications

	A6011 (1200mm)	A6011 (1000mm)	A6011 (800mm)
Frequency Range:	865 – 868 MHz / 902-928 MHz		
Polarization:	Circular		
Far-field Gain:	11dBic	10 dBiC	10 dBic
Far-field 3dB beamwidth:	60Deg / 22Deg	70 Deg / 25 Deg	70 Deg / 25 Deg
Axial Ratio	2dB (Typical)		
VSWR	2 typical	1.8 typical	1.8 typical
Front to back ratio:	> -22dB	> -20dB	> -20dB
Read zone above belt:	≤ 900 mm		
Read zone across belt:	≤ 1200 mm	≤ 1000 mm	≤ 180 mm
Nominal Impedance:	50 Ω		
Anti-static protection:	Yes (Earthing cable, static dissipative radome)		
Maximum Input Power:	3 W		



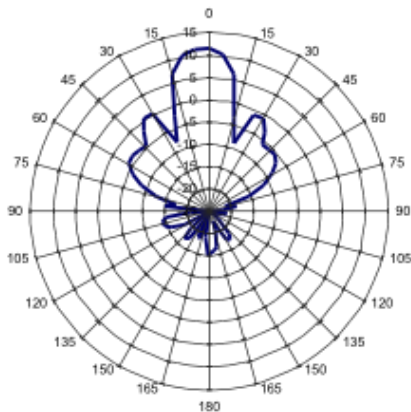
## Ordering Information

*(please quote both product code & part no.)*

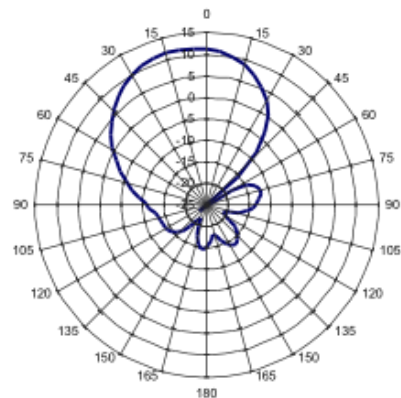
Product Code	Band	Part No.
A6011 (1200 mm)	ETSI 864-868 MHz	70730
	FCC 902-928 MHz	70731
A6011 (1000 mm)	ETSI 864-868 MHz	71892
	FCC 902-928 MHz	71919
A6011 (800 mm)	ETSI 864-868 MHz	71891
	FCC 902-928 MHz	71906
Cable Accessories	Cable Type	Part No.
Cable 2 m, SMA to RPTNC	LMR 195 / 240	71436 / 71782
Cable 4 m, SMA to RPTNC	LMR 195 / 240	71437 / 71784
Cable 8 m, SMA to RPTNC	LMR 195 / 240	71438 / 71788

### Electric Field Radiation Patterns

**A6011 (1200 mm)**



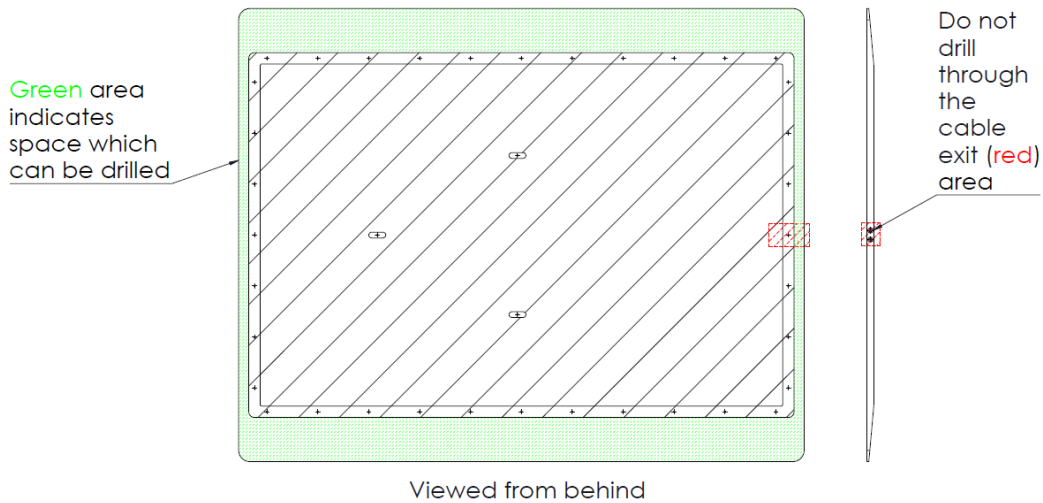
XZ-plane



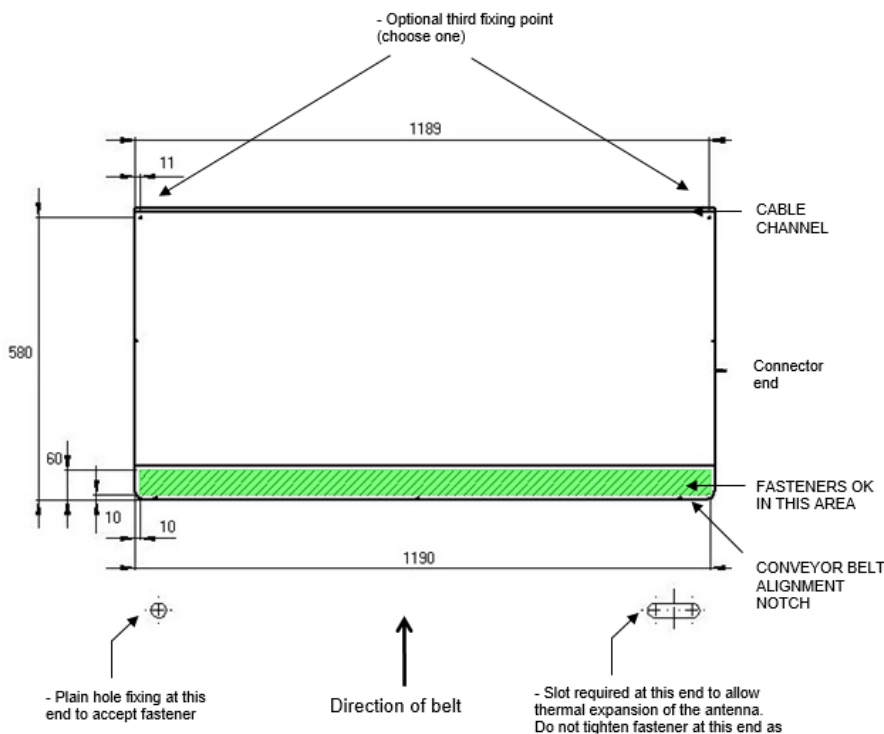
YZ-plane

Mounting information: (for more detailed mounting information, please contact [info@times-7.com](mailto:info@times-7.com))

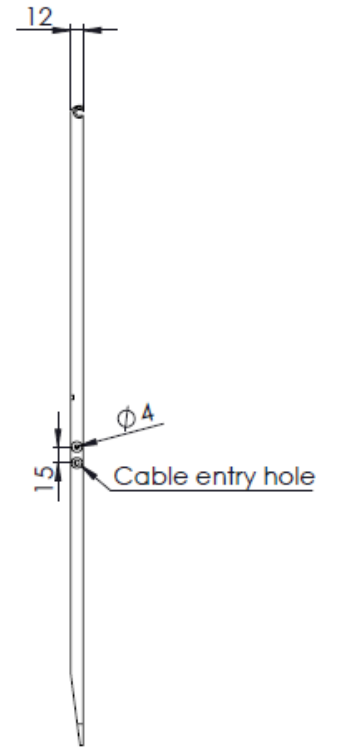
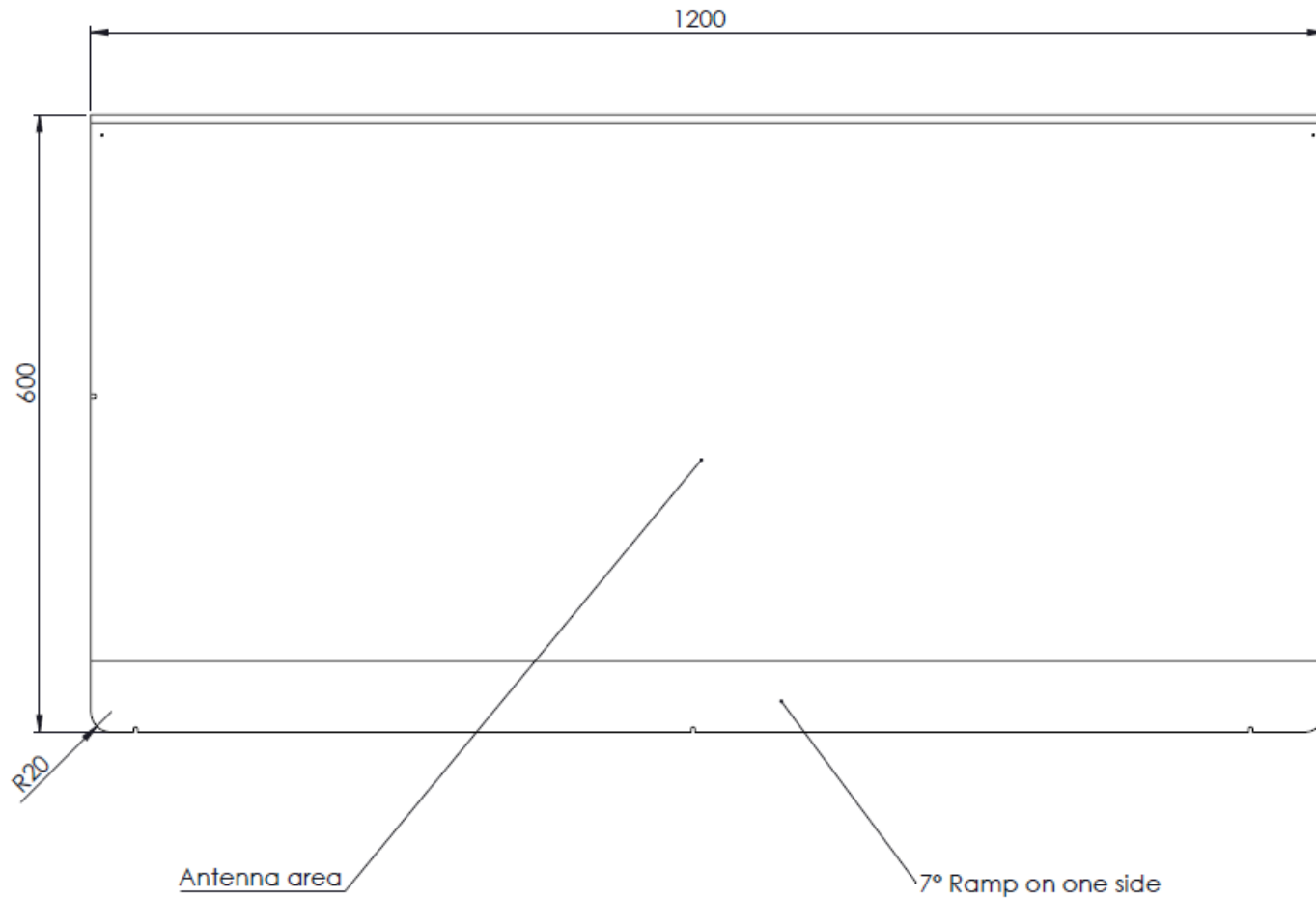
The following drawing indicates the drill area for the **A6011 800 mm and 1000 mm**.



Mounting information for the **A6011 1200 mm**.



Preferred fastening area on the underbelt antenna is marked with hatched lines and green shading. Two attachment points are provided on the other side of the antenna, but only one can be used at any one time to allow for thermal expansion of the underbelt antenna housing. Alignment notches for the conveyor and cable channels for routing are also shown.



UNLESS OTHERWISE SPECIFIED:

DIMENSIONS ARE IN mm  
TOLERANCES:  
FRACTIONAL ±  
ANGULAR: MACH ± BEND ±  
TWO PLACE DECIMAL ±  
THREE PLACE DECIMAL ±

INTERPRET GEOMETRIC  
TOLERANCING PER:

MATERIAL

FINISH

DO NOT SCALE DRAWING

## 1200mm Under Belt Antenna

SIZE	DWG. NO.	REV
<b>A3</b>		<b>B</b>
SCALE: 1:5	WEIGHT:	SHEET 1 OF 1

R20

Antenna area

1000

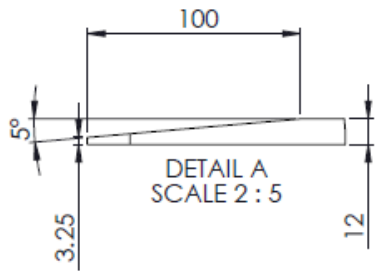
5° Ramp on each end

800

Cable entry hole

12

Ø5



UNLESS OTHERWISE SPECIFIED:

DIMENSIONS ARE IN mm  
 TOLERANCES:  
 FRACTIONAL ±  
 ANGULAR: MACH ± BEND ±  
 TWO PLACE DECIMAL ±  
 THREE PLACE DECIMAL ±

INTERPRET GEOMETRIC TOLERANCING PER:

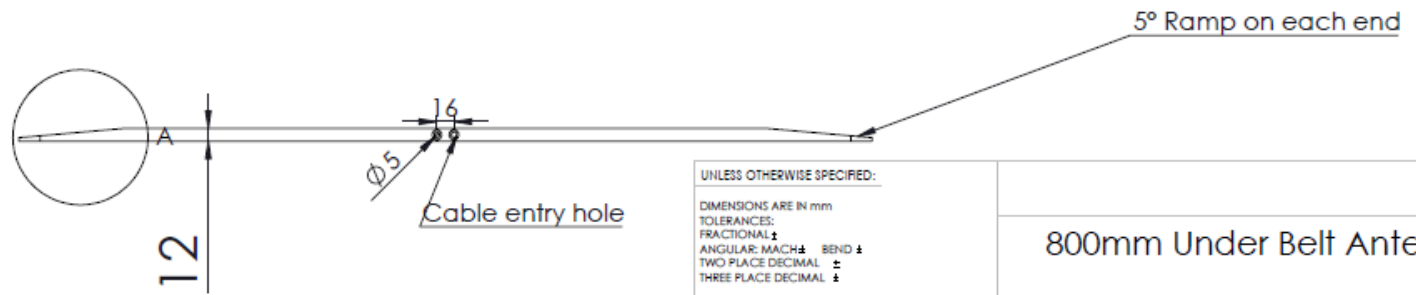
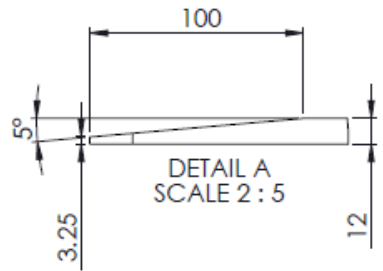
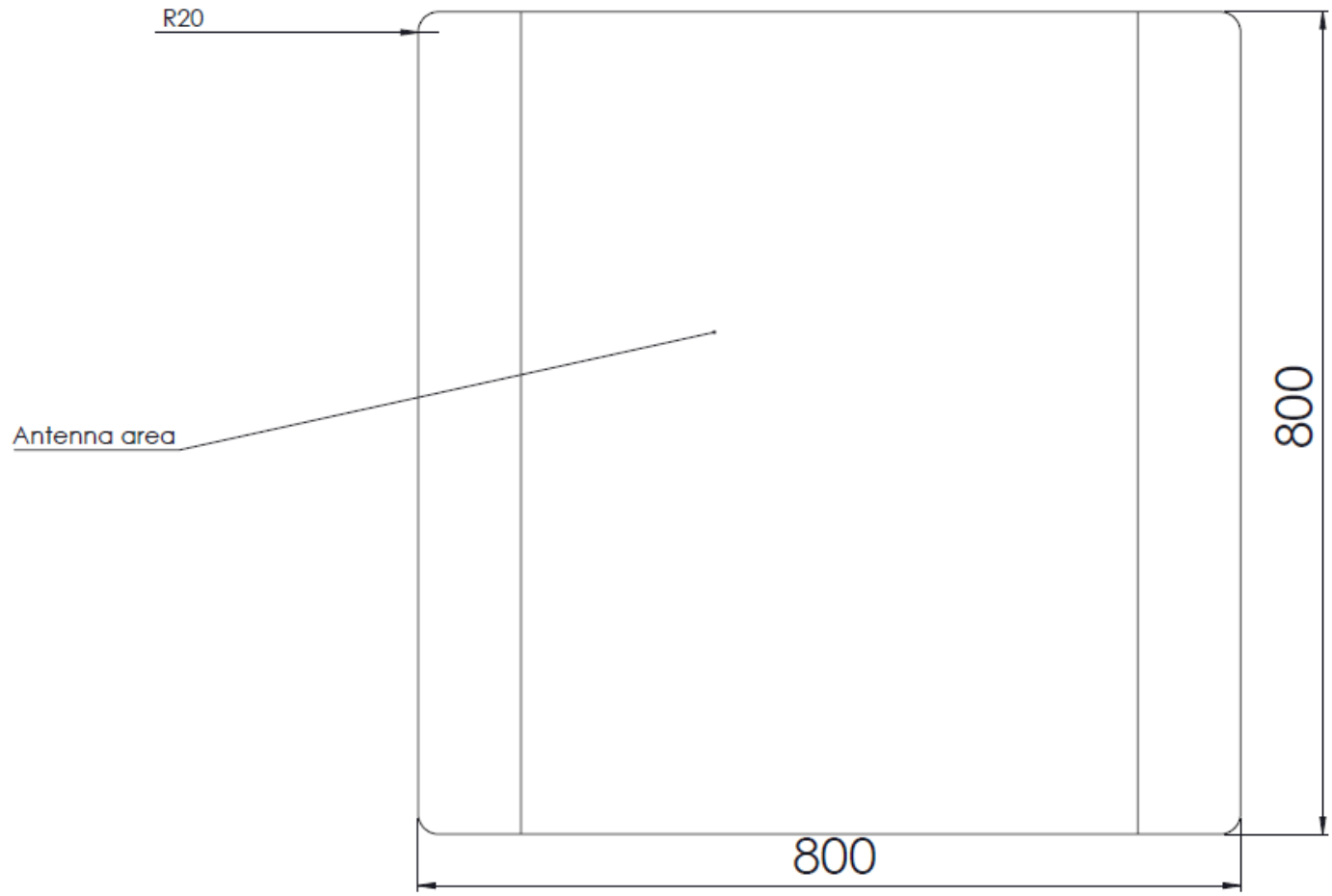
MATERIAL

FINISH

DO NOT SCALE DRAWING

1000mm Under Belt Antenna

SIZE	DWG. NO.	REV
<b>A3</b>		<b>B</b>
SCALE: 1:5	WEIGHT:	SHEET 1 OF 1



UNLESS OTHERWISE SPECIFIED:  
 DIMENSIONS ARE IN mm  
 TOLERANCES:  
 FRACTIONAL ±  
 ANGULAR: MACH ± BEND ±  
 TWO PLACE DECIMAL ±  
 THREE PLACE DECIMAL ±

INTERPRET GEOMETRIC TOLERANCING PER:  
 MATERIAL:  
 FINISH:  
 DO NOT SCALE DRAWING

800mm Under Belt Antenna		
SIZE	DWG. NO.	REV
<b>A3</b>		<b>B</b>
SCALE: 1:5	WEIGHT:	SHEET 1 OF 1

## Applications

### Airport Portal:

The A6011 Underbelt Antenna combined with the A6020 Conveyor Portal Antenna is perfect for airport baggage handling and provides industry leading accuracy rates. It can easily be installed into existing airport infrastructure.

For more information, please contact [info@times-7.com](mailto:info@times-7.com).



### OUR GLOBAL NETWORK

Constantly increasing market reach and influence in the global RFID industry, Times-7's international support spans The Americas, Europe, and Asia Pacific regions through our distributor, authorized reseller and integrated solutions provider network.

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