



**AGX-245Ex-UHF  
Long range patch  
antenna  
ATEX Zone 1**



<b>Product Description</b>		<b>AGX-245Ex UHF antenna</b>
<p>The AGX 245Ex is a rugged antenna for use in hazardous areas, which is classed as simple apparatus as defined in the international area intrinsic safety standards. It is suitable for either indoor or outdoor use. The AGX 245Ex covers both European and American RFID bands, and allows excellent read reliability due to its circular polarised design—allowing tags to be read in any orientation.</p> <p>The antenna has been evaluated as compliant to the latest EN60079-0 &amp; EN60079-11 standards to determine suitable parameters for intrinsic safety, allowing users to easily install with their own intrinsically safe equipment. Also, the antenna is suitable for use with a range of UHF RFID readers such as the AGX 100Ex / AGX 101Ex, and can be used with any other solutions that utilise intrinsically safe RF galvanic isolators. Indoor and Outdoor operation- The AGX 245Ex is suitable for both indoor and outdoor operation, as it is made from durable UV resistant ABS plastic, with good thermal shock resistance. Rated to IP66 and -20°C to 70°C it can be used in every climate without concerns.</p> <p>Gain and Directionality-The AGX 245Ex offers a gain of up to 7dBi. With a spherical directional pattern, it is ideally suited for use in a wide variety of RFID applications allowing tags to be read in any orientation. It is important to note that the AGX 245Ex antenna is classed as "Simple Apparatus" under international intrinsic safety standards. This means that it is assessed to be safe to use in a Hazardous Area, but must be connected to a suitably certified wireless device with an intrinsically safe RF output with defined Vmax, Imax and Pmax safety parameters. The AGX 245Ex antenna cannot be connected to an RF source that is not intrinsically safe and still maintain its suitability for installation in a hazardous area!</p>		
<b>Electrical Characteristics</b>		
Operating Frequency	UHF 860 - 960MHz	
Transponder Types:	all ISO 18000-6 EPC Class 1 Gen 2 UHF	
<b>Thermal &amp; Environmental Characteristics</b>		
Operating Temperature	-20°C up to +70°C	
<b>Physical Characteristics</b>		
Compliance:	CE, RoHS	
Length:	245 mm	
Width:	235 mm	
Thickness:	40 mm	
Weight:	470gr	
IP Class	IP66 (NEMA 4X)	
Axial ratio	< 1dB	
Feed power handling	10 W	
Antenna gain:	7dBi (+/-1 dB)	
Antenna connector:	N-female connector	
Nominal input impedance:	50 Ohm	
Polarization:	Circular	
Horizontal 3 dB beam width	67° (± 5°)	
Vertical 3 dB beam width	69° (± 5°)	
Voltage Standing Wave Ratio:	< 1.3:1	
Wind loading	160 km/h	
Shock	40G at 10msec	
Ex Marking:	 II 1 G T6, IP66 -20°C to 70°C, Simple Apparatus	
Assosiated Accessories:	Mounting Set: Wall/mast clamp	
Assosiated Readers:	<b>AGX 101Ex / 100Ex UHF</b>	
<b>Article no:</b>		
Article no:	<b>AGX-245Ex UHF</b>	
<b>Typical Applications</b>		
All LF RFID applications in ATEX Zones 1		

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