

## Get the Xtenna Hybrid™ Advantage

## Implementing an RFID solution?

from small start-ups to  
enterprise level applications –  
innovative technology  
for every business

### Dual Circular Polarized Antennas with Integrated RFID Reader

An innovation that overcomes current RFID shortcomings, extends reach, improves and optimizes operations, and therefore extends functionality beyond existing applications-Essen's Xtenna Hybrid™ is a ready-to-use integrated RFID device that gives superior performance is convenient to use, extremely cost-effective and offers faster ROI.

#### Specifications

Frequency bands - (US/EU/India/Korea/China)  
Device powered through Power-over-Ethernet (PoE)  
TCP/IP based interface - RJ45  
Bi-static antennas with separate receive/transmit lobes  
Firmware upgradable  
Certifications - meets RoHS, MIC, ETSI & FCC standards

#### Applications

- A to B logic to track Personnel / Asset moving in/out.
- Compliance with IP65 standard. Easily usable in extraneous environment.
- Can operate in Bi-Static mode.

#### Advantages

Single integrated unit with 2 Antenna, easily mountable  
Eliminates need for a regular on-site power source  
Simple plug-and-play device  
Only requires inexpensive CAT-6 cable that carries 48V DC power simultaneously along with data, allowing the device to be powered from a distance of upto 330 ft.  
Lossless digital transmission  
Supports Dense Reader Mode  
Remotely manageable

**Provides enterprise level seamless connectivity with Middleware (Xtenna Studio™, Microsoft BizTalk RFID, IBM WebSphere Premises Server), Paid/Free Databases (IBM DB2, Oracle, MySQL) and ERP applications (SAP)**



# High Performance RFID Tags\*\*

## Essen's Special RFID Tags for longer read distances

Essen RFID also offers superior RFID Tags that have been specially devised to be read at longer distances. These special Tags outperform regular Passive RFID Tags through long-distance reads that enable quick item clearance, thereby improving overall operational efficiency. Essen RFID Tags are available in four specialized varieties, each customized for specific read objectives. From tracking people on the move, to vehicle access, to liquid containers and metallic objects, to bulk cartons and pallets - Essen RFID Tags provide full value for money, through higher performance, better reliability and greater efficiency.



### Hybrid Xtenna™ – Technical Specifications

		European Standard Xtenna™ - DCP867A	US FCC Standard Xtenna™ - DCP915A
Antenna P/N	Frequency Band	865-870 Mhz	902-928 Mhz
	Gain	7.5dBi (Typ)(Each)	
	Polarization	RH+LH	
	AZ/EL BW	62° / 66°	60° / 72°
	Port to Port Isolation	-40 dB (typ)	
	VSWR 50 Ohm Impedance	1.4:1 (max)	1.5:1 (max)
	Sidelobe Level	-12 dB (max)	
	Axial Ratio Level	3.0 dB (typ)	
	Max. Input Power	4 Watts	
	Integrated Reader	Frequency Band	865-870 Mhz
RFID Tag and Protocol Support		EPC Generation 2 R/W, Full Anti-Collision, DRM	
RF Max Power Output		30 dbm +/- 1.0 dB	
RF Min Power Output		5 dbm +/- 1.0 dB	
Flash Memory		256 Kb	
RAM		64 Kb	
Firmware		Upgradable	
Regulatory		Meets RoHS, MIC, ETSI and FCC Regulations	
General	Interface	Ethernet - RJ45	
	Dimensions	225 x 245 x 55 mm	
	Weight	1KG	

Essen reserves the right to modify specifications without notice.

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Note: All distances in free air. Optimized for Xtenna™

#### PERSONNA™

For tracking people  
 Read distance: 45 ft.  
 Tag size: 85mm x 55mm x 1mm  
 Card carried on person

#### PARKA™

For vehicle tracking  
 Read distance: 45 ft.  
 Tag size: 90mm x 65mm x 1mm  
 Mounted inside car windshield

#### GENERA™

For cartons, cases, pallets, etc.  
 Read distance: 45 ft.  
 Tag size: 85mm x 55mm x 1mm  
 Adhesive affixing

#### METALLICA™

For metal casings, hardware, etc.  
 Read distance: 25 ft.  
 Tag size: 102mm x 38mm x 8mm  
 Adhesive affixing, Reveting

#### µMETALLICA™

For metal casings, hardware, etc.  
 Read distance: 6 ft & 8ft Respectively  
 Tag size: 40mm x 15mm x 4mm  
 Tag size: 79mm x 16mm x 3mm  
 Adhesive affixing

#### ACQUA™

For Laundry, appeal tracking  
 Read distance: 25 ft.  
 Tag size: 100mm x 27mm x 6mm  
 Tie, String Attaching

#### SOLANNA™

For Solar Panel  
 Read distance: 30 ft.  
 Tag size: 86mm x 28mm x 1mm  
 Adhesive affixing

#### BOVINA™

For tracking and identification of Cattle  
 Read distance: 25 ft.  
 Tag size: 80mm x 68mm x 2.5mm  
 Press Punch

