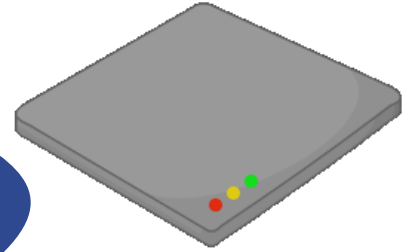


Hands-free, Wide Area, Always On, Continuous Scanning

CS Smart Antenna Technology is the source of RTLS data which is filtered and customized from the RFC Operating System. It is an essential component to delivering hands-free, continuous, 3D location of RAIN RFID (Passive UHF) tags. Both the CS-445 and the larger A-302 have long read-range capabilities and flexible mounting options suited for high-ceiling and wide areas.



IDENTIFY



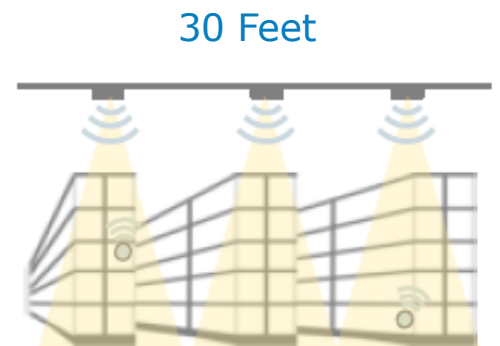
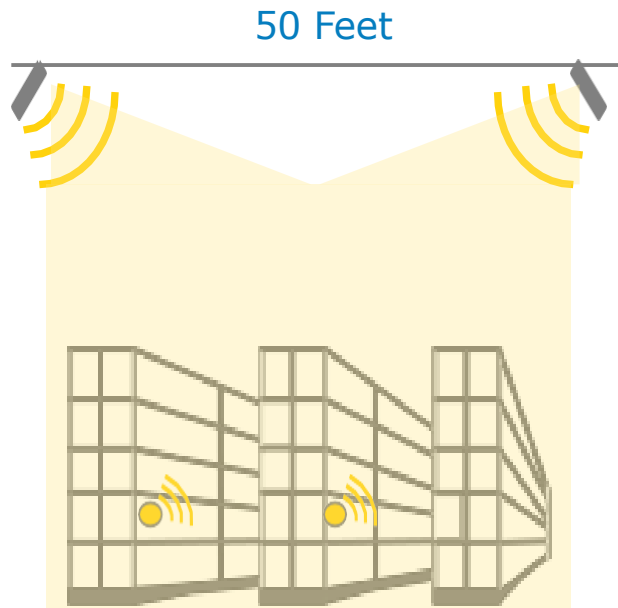
LOCATE



TRACK

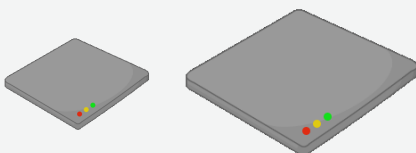


High Ceiling, Fixed Infrastructure Tracks Everything Using Cost Effective RAIN RFID Tags



Impressive Performance

CS Smart Antenna



Tag Read Distance (ft)
 Mounting Height (ft)
 Tag Read Period (ms)
 Location Accuracy (ft)
 Power Source

CS-445

45
 10 – 30
 8
 1.0 – 1.5
 PoE+

A-302

75
 25 – 50
 8
 1.5 – 3.0
 PoE+

Passive RTLS CS Smart Antenna



Series

CS-445

A-302

	Min	Max	Units	Min	Max	Units	
Performance	Tag read period ¹	-	8	ms	-	8	ms
	Tag location accuracy	1.0 (0.31)	1.5 (0.46)	ft (m)	1.5 (0.46)	3 (0.9)	ft (m)
	Scan angle – horizontal	-45	45	Degrees	-45	45	Degrees
	Scan angle – vertical	-45	45	Degrees	-45	45	Degrees
	Power Level ²	0.2	4	W-EIRP	0.2	4	W-EIRP
	Radiated Power (FCC/IC)	-	+36	dBm (4W) EIRP	-	+36	dBm (4W) EIRP
	Radiated Power (ETSI Upper) ³	-	+33	dBm (2W) ERP	-	+33	dBm (2W) ERP
Radiated Power (ETSI Lower) ³	-	+36	dBm (4W) EIRP	-	-	-	
Power	PoE IEEE 802.3at Class 4	42.5	57	VDC	42.5	57	VDC
	PoE Current	-	0.6	A	-	0.6	A
	AC Line Voltage	-	-	-	90	264	VAC
	AC Frequency	-	-	-	47	63	Hz
	Current - 100 VAC	-	-	-	-	1.3	A (rms)
	Current - 240 VAC	-	-	-	-	0.7	A (rms)
Operating	Operating Environment	-	Indoor	-	-	Indoor	-
	Humidity Range	5	95	%RH	5	95	%RH
	Operating Temp Range ⁴	-30 (-22)	60 (140)	°C (°F)	-30 (-22)	60 (140)	°C (°F)
	Non-Op Temp Range	-40 (-40)	85 (185)	°C (°F)	-40 (-40)	85 (185)	°C (°F)
	Cold Start Installation Temp	-10 (-14)	-	°C (°F)	-10 (-14)	-	°C (°F)
Mechanical	Length	23.75 in (60 cm)			35.6 in (90 cm)		
	Width	23.75 in (60 cm)			35.6 in (90 cm)		
	Depth	4 in (10 cm)			6 in (16 cm)		
	Weight	15 lbs (6.8 kg)			54 lbs (25 kg)		
Installation	All-In-One Integrated	CS-445 BESPA RFID Reader			A-302 BESPA RFID Reader		
		Adjustable Mounting Kit ⁵			Adjustable Mounting Kit ⁵		
	Data & Power Connector	RJ45 10/100 Ethernet			RJ45 10/100 Ethernet		
	AC Power Connector	-			IEC-320		

Regulatory Certifications

FCC CFR47 Part 15.247 at RFID reader and system level Subpart B EMC, ETSI 302-208, EN 301 489-1, EN 301 489-3, CE EN55024, EN55032, EN55035

¹ Time to read one tag, given a Q of 0 (tag population of 1). System is turned on and enabled

² Calibrated power level settable in firmware

³ ETSI-Lower Band 865-868MHz ETSI-Upper Band 915-921MHz where allowed

⁴ Unit operating temperature range does not indicate compliance with local safety standards

⁵ CS-445 antennas must be fixed and not allowed to move after installation

