



Alpha Wireless...  
develops the right antennas to solve the right problems for Irby Co. Utilities.

## Overview

Irby Co. and Alpha Wireless first started working together in 2017. Irby Co. is an electrical distributor of electrical supplies and services based in Jackson, Mississippi, US. Their customers include industrial, commercial, contractor, and utility businesses. Irby Co. Utilities services over 650 electric utilities and delivers technology communications for both operational needs, broadband, wireless and fibre optics – focusing specifically on municipal and cooperative utilities.

As a Division of Sonepar, Irby Co. are part of a large privately held parent company with global market leadership in B2B distribution of electrical products, solutions, and related services.

## Problem

Irby Co. works with many utility cooperatives, which are tasked with the delivery of a public utility such as electricity, water or telecommunications to its members. They are the primary new market for Irby Co. and it's this market that Alpha Wireless developed antenna solutions to suit Irby Co's. exact requirements. Their focus is on rural fixed wireless and broadband to underserved areas that in the past weren't viable for electric services and equally don't have good broadband or cellular services either.

These cooperative utilities strive to bring the best service at the lowest possible cost to their members.

The biggest challenge faced by Irby Co. Utilities was form factor and scale of deployment. The products selected addressed those challenges to enable rapid deployment and connectivity.

## Solution

Irby Co. uses Alpha Wireless for all multipoint access solutions, primarily mid-band spectrum, CBRS and LTE. Also, Irby Co. have 5 GHz unlicensed solutions, which have been supported by Cambium Radios housed within Alpha Wireless antennas.

"The reason we chose Alpha Wireless for Irby Co. Utilities is for the quality of the antenna and ease of doing business – we worked closely on co-creating innovative solutions that fit our exact and specific requirements. Quality antennas used to be ubiquitous in the market but got displaced by Asian suppliers who shared high quality data sheets but delivered low quality products", says Patrick Reams, Director Technology Services, Irby Co.



[alphawireless.com](http://alphawireless.com)

Alpha Wireless, an Irish company designs and manufactures high performance antenna solutions.

Mobile and fixed wireless service providers face a daunting task of satisfying growing demand for coverage and capacity while minimizing the cost to serve. The old models of network deployment are no longer sustainable, and Alpha Wireless is addressing this by...changing the way wireless networks are built.

We are proud to be known as an innovator within the industry, striving to not only understand the technical challenges our customers face, but also their business challenges. Alpha Wireless has offices in Europe and US. ISO 9001 accredited.

A summary of the main products developed for Irby Co. Utilities include:



**AW3625 Small Cell Antenna**

Frequencies: 3300 – 3800 MHz  
 Ports: 2  
 Beamwidth: 360°  
 Gain: dBi 8.5  
 Tilt: MET  
 Primary Family: Small Cell



**AW3460 Canister Antenna**

"This has been our go-to mini-macro for rural deployments."

Frequencies: 3300 – 3800 MHz  
 Ports: 6  
 Beamwidth: 65°  
 Gain: dBi 17.0  
 Tilt: MET  
 Primary Family: Canister / Tri-Sector



**AW3372 Small Cell Antenna**

Frequencies: 3300 – 3800 MHz  
 Ports: 2  
 Beamwidth: 65°  
 Gain: dBi 12.5  
 Tilt: Fixed  
 Primary Family: Small Cell

"Taking Alpha Wireless' modular approach to antenna designs, they skilfully developed the right solution, to suit the right problem for our customer requirements at Irby Co. Utilities."

## Results

The Alpha Wireless products developed met their stated technical objectives and performance required according to Reams. They also met their commercial objectives too – leveraging midband spectrum for small cell fixed wireless access in rural areas as a hedge to full fibre optics to premises builds or as stop gap to fibre being installed and completed. Irby Co. Utilities leveraged fixed wireless for their customers in two ways

- If density doesn't support the connection to all premises then wireless has given the edge to spreading out connectivity where it's needed - fast.
- The antennas have been used as a multiplier where we can put wireless small cells in during construction and serve mainline customers with a wireless service, ensuring speed to market.

"In both cases the three products co-created with Alpha Wireless specifically focused on enabling the above processes for fixed wireless - speed to market from a commercial perspective for gaining revenue and speed to market for meeting a customer need for connectivity."

"My expectations have been exceeded throughout the process with Alpha Wireless. They hit every deadline that was set, every shipping marker that was set and have been upfront about any challenges that occurred. Their speed to market is impressive; we co-created our antennas and had them in hand within four months. As a manufacturer and a vendor, I can't think of a relationship that could be any better", says Reams.



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