

CUSTOMER STORY

Cell
DetectPreventing Contraband Cell Phones
Using Transmission Detection

Cell Detect, Inc. has a mission is to remove illicit cell phones in all correctional facilities. There is a new product in development that will be used in prisons and jails to eliminate unauthorized cell phone use. The partnership between Cell Detect and F3 Wireless began with F3 providing details of phone transmission signals along with documentation that described the various cellular technologies and what each type of transmission would look like.

With the information, knowledge, and expertise that F3 provided, Cell Detect designed a detector that would detect various types of cell phones based on transmission. This formed the basis of a working prototype. Once the detector prototypes were built, F3 completed lab testing and helped Cell Detect fine tune and improve overall system sensitivity.

F3's work included assisting in the design of the cellular detection algorithm, designing the LTE/LoRa custom antenna, completing RF matching, and finalizing filter design. The antenna specs were incredibly difficult since the antenna needed to span a range from 600MHz to 2100MHz. F3 delivered a working flex antenna while also keeping manufacturing costs down. The next step in getting this product to market is achieving the required FCC certifications, which F3 is also helping Cell Detect with.



Being able to call F3 whenever we were having technical difficulties was a huge value. It's like having a team of experts working directly for us whenever we need it. F3 is extremely familiar with our product, they know and understand our market, and they are technical experts. We would be crazy not to continue to utilize their help.

- Chris Defant, CEO at Cell Detect

