Indoor Cellular Coverage for Solar Farm

CEL-FI by NEXTIVITY

Jonathan, *IT Manager for Power Company*

Jonathan is the head of IT for a power company, which operates a solar farm. He is responsible for ensuring that all business systems run smoothly to support the safe and efficient operation of the power plant and its assets.

BUSINESS NEED

RURAL SOLAR FARM LACKS STRONG, RELIABLE SIGNAL TO TRANSMIT VIDEO BACK TO CENTRAL OFFICE, PUTTING POWER COMPANY AT RISK

The solar farm, which is comprised of approximately 5000 PV module solar panels, provides renewable energy to the local community. As with any power company, security and safety are of the upmost importance. Located in a rural area 10 kilometers away from the power company's central office, the company installed a closed-circuit television (CCTV) system to remotely monitor the solar farm. To achieve 24x7x365 monitoring from the site to the central office, the company needed a reliable 4G signal to transmit video. However, the 2,500 sq. ft. site utilized a rudimentary wireless broadband solution comprised of a SIM card inserted into a 4G router. The result was a weak or non-existent 4G signal. Jonathan was tasked with finding a stable 4G solution that would give the power company the continuous visibility it needed, while ensuring that its critical video surveillance and communication equipment were constantly connected.

SOLUTION

CEL-FI GO X PROVIDES A STABLE CELLULAR SIGNAL FOR M2M CONNECTIVITY

Jonathan calls the company's carrier to find out about viable solutions to the problem. His carrier representative suggests the Cel-Fi GO X Smart Signal Booster, a carrier-class cellular coverage solution that maximizes cellular coverage for 3G/4G/LTE and provides coverage in spaces up to 15,000 sq. ft. Cel-Fi GO X is NEMA 4 rated weather resistant, so it can be used for both indoor and outdoor applications. Jonathan is given a trial unit. An installer follows the five-step installation process and mounts the accompanying antenna to the side of the site office to draw signal from the carrier's nearby cell tower—a process that takes less than an hour. Jonathan plugs in Cel-Fi GO X, which offers 100db of gain. Within minutes, there is a strong, stable cellular signal providing reliable site-to-site connectivity — effectively ending the "data nightmare" plaguing the power company. After purchasing Cel-Fi GO X, Jonathan takes it one step further and downloads Cel-Fi WAVE, allowing him to push software updates from the cloud and remotely monitor and manage Cel-Fi GO. This positions the power company to add more Cel-Fi GO systems as it continues to expand its solar farm footprint.

5 STEP SETUP

Step 1:	Step 2:	Step 3:	Step 4:	Step 5:
Install Donor Antenna	**Install Server Antenna**	**Mount Cel-Fi GO X Near Power Outlet**	**Connect Donor & Server Antennas to the Cel-Fi GO X Unit**	**Plug in Cel-Fi GO X**

CEL-FI GO X

BEYOND BETTER COVERAGE

- **Easy to install in five simple steps**
- **Improved connectivity and visibility**
- **Enhances operational safety and security**

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