

Products & Capabilities





Axcera is a premier provider of RF transmission solutions for the broadcast, mobile TV and MMDS



industries. Our products and services are used worldwide by broadcasters, mobile media & broadband wireless access providers and MMDS system operators. For over 25 years, we have earned our reputation as a high quality supplier with the focus on meeting customers' needs.



Axcera products are designed and manufactured to ISO 9001:2008 standards

Broadcast Television Transmitter Solutions



Innovator® CX Solid State Transmitter/Translator/Transposer/Gap Filler
Designed as a compact, affordable and high quality transmission solution, the Innovator CX features multiple configurations for any application.

Product Features

- Frequency agile exciter
- Broadband amplifier
- Frequency: 174-230 MHz VHF, 470-862 MHz UHF
- Up to 2kW Digital (UHF), 5kW Analog (UHF), 6kW Digital (VHF), 10 kW Analog (VHF)
- Compact, single tray configuration up to 200W VHF/125W UHF
- Low delay echo-canceling repeater version available - used for gap filler applications
- Remote monitoring and control capability through a Web browser or SNMP interface
- Broadcast any digital standard when paired with the appropriate Axcera exciter
- **Now available for DAB/DMB - Band III**



Innovator® HX Air-Cooled Solid State Transmitter

The Innovator HX offers a modern design with a high level of versatility, allowing broadcasters to choose the configuration that best meets their individual needs. Reliable, quiet and efficient air-cooling provides for very low transistor junction temperatures for long amplifier life.

Product Features

- Frequency agile exciter
- Broadband amplifiers
- Frequency: 54-88 MHz & 170-220 MHz VHF, 470-862 MHz UHF
- Up to 40kW
- Modular construction with hot-swappable components
- Parallel amplifiers and power supplies
- Remote monitoring and control capability through a Web browser or SNMP interface
- Broadcast any standard when paired with the appropriate Axcera exciter



6X™ Series Liquid-Cooled Solid State Transmitter

This state-of-the-art liquid-cooled transmitter uses our frequency agile exciter and the latest LDMOS devices for broadband operation across the entire UHF band. The 6X Series employs high power density, reducing floor space requirements.

Product Features

- Frequency agile exciter
- Broadband amplifiers
- Frequency: 470-862 MHz UHF
- Up to 20kW COFDM/40kW ATSC/60kW Analog
- Hot swappable amplifiers with parallel configuration
- Optional N+1 power supply configurations available
- Remote monitoring and control capability through a Web browser or SNMP interface
- Broadcast any standard when paired with the appropriate Axcera exciter



Visionary® Series IOT Transmitter

Whether your requirement is a single or multi-collector IOT; air, water or water/glycol cooling; digital or analog, the Visionary Series transmitter is your high power UHF solution for today and tomorrow.

Product Features

- Frequency agile exciter
- Broadband LDMOS driver amplifiers
- Frequency: 470-862 MHz UHF
- Up to 80kW DVB/120kW ATSC/280kW analog
- Most versatile design available
- Standard or multiple collector IOTs
- Broadcast any standard when paired with the appropriate Axcera exciter

Mobile Multimedia Transmitter Solutions



8xC Series Mobile Multimedia Base Station

The 8xC Series transmitters are the result of a global design strategy. All aspects of the product design, from frequency range to multi-standard compatibility, reflect our long-term commitment to service providers worldwide.

Product Features

- Frequency agile exciter
- Broadband amplifiers
- L-Band/S-Band
- Up to 400W average COFDM
- Parallel amplifiers and power supplies
- Optional N+1 power supply configurations available
- Modular construction with hot-swappable components
- Remote monitoring and control capability through a web browser or SNMP interface
- Broadcast any digital standard when paired with the appropriate Axcera exciter



Mobile Media Outdoor Enclosures

Environmental enclosures allow for simple outdoor or rooftop installation. They provide environmental control for operation over a wide range of ambient temperatures while still providing easy access to system components. Enclosures are field-proven in the harshest environments ensuring the reliability of your base station anywhere in the world.

Product Features

- Can be equipped with surge or lightning protection, heating, fire suppression and more
- Air conditioned and non-air conditioned enclosures available

Complete ATSC Mobile DTV Solutions



ATSC Mobile DTV System

Axcera's complete ATSC Mobile DTV system combines main service and mobile content into a single transport stream feeding an ATSC broadcast transmitter. Using our field-tested ATSC Mobile DTV Multiplexer and Axciter digital modulator, Axcera can easily upgrade a broadcaster's existing digital transmitter to carry Mobile DTV service.

The Most Comprehensive Line of Modulators/Exciters



Allows Axcera transmitters to support all worldwide standards:

- | | | | |
|-------------------|------------|-----------|---------|
| • ATSC | • DVB-T/T2 | • DAB | • QAM |
| • ATSC Mobile DTV | • DVB-H/SH | • ISDB-T | • T-DMB |
| • NTSC | • PAL | • ISDB-Tb | • CMMB |

- Integrated satellite and GPS receivers are available for select standards
- Adaptive correction available for most standards

The Most Comprehensive Line of MMDS Transmitters



5720 Series Discrete MMDS Transmitter

The 5720 Series transmitters provide a platform which allows for simplified installation, field service and system upgrades. Axcera has taken significant steps to reduce system operating costs and size, while providing a solution that works for either analog or digital transmission.

Product Features

- S-Band
- Up to 280W analog/100W average QAM/50W COFDM
- Modular components
- Modular amplifiers and power supplies
- Remote control system available
- Offers video delivery and two-way DOCSIS® based broadband wireless access systems
- Broadcast any standard when paired with the appropriate Axcera exciter



6450B Series Broadband MMDS Transmitter/6470B Series MMDS Repeater

The 6450B series are rack mounted broadband transmitters that provide multichannel transmission of S-Band signals, digital or analog. Operators can choose from six models which provide from 20 to 1000 watts of peak envelope power. Also available as 6470B Series repeaters.

Product Features

- S-Band
- Power levels up to 1000W peak
- External 10MHz input for precise frequency control
- Built-in diagnostics
- Boosters/gap fillers available in a wide range of power levels
- Broadcast any standard when paired with the appropriate Axcera exciter
- Primary/backup switching option



605C Outdoor Broadband Booster/Gap Filler

MMDS Wireless cable systems may have shadowed areas that cannot be serviced by the main transmitter site. This system offers an economical solution to increase your subscriber base and expand your coverage area.

Product Features

- S-Band
- Enclosed in a rugged and weatherproof outdoor enclosure with convection cooling
- Provides 16 Watts PEP
- Characterized to stringent 60dB C/CTB specifications for superior picture quality

Custom Solutions Are Standard For Us



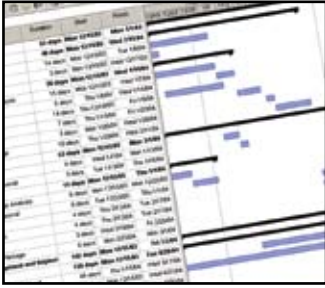
Axcera is able to provide RF solutions for most applications. We will work with you to build your system to meet your specifications including power levels, frequency bands, and network management systems.

- Custom power levels
- Custom frequency bands
- Network management systems
- Analog to digital conversions
- Multi-channel and main-alternate systems
- Third party equipment integration
- Total system design
- Scientific applications
- Military applications

Projects & Capabilities

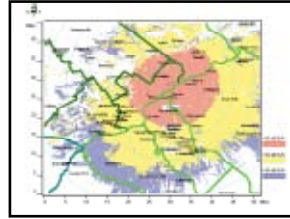
Project Management

Services are available to support the design and implementation of systems involving Axcera products. Axcera maintains a fully staffed project management and support team of engineers to help with application, design, and support of customer systems.



Features

- RF coverage analysis
- System design
- Installation
- Maintenance packages
- Project management



Notable Project: Mt. Wilson

Axcera led RF system design, manufacture, project management and implementation of this multiple channel broadcast facility serving the Los Angeles market. Project involves a unique cooling and control system, along with a complex RF combiner network.



Combiner System



Community Heat Exchanger

Notable Project: WPSX Distributed Transmission Network

Axcera's award-winning Distributed Transmission Adaptor was used to implement a Distributed Transmission System for WPSX-DT. The PBS station serves the Pennsylvania cities of Clearfield, State College, Johnstown and Altoona. Distributed Transmission allows television broadcasters to expand coverage by deploying multiple transmitters in a single frequency network.



State College Transmitter Site



Clearfield Transmitter Site

Notable Project: Mobile TV

Axcera supplied and managed the installation of the majority of DVB-H base stations to Crown Castle's Mobile TV subsidiary, Modeo, for a technology trial in Pittsburgh and a commercial trial in New York City with over 60 units installed in New York City alone.



DVB-H Base Station



Base Station Installation



Complete System Integration & Customer Support

Axcera is serious about our commitment to "Total Customer Happiness." When you choose our products and systems, you will also receive our relentless commitment to your overall satisfaction. Our extensive RF capabilities and experience enables us to provide design and integration services and on-going customer service and support that are unparalleled in the broadcast industry.

Axcera offers complete RF coverage analysis, system design and integration, installation, project management and support services directly and through our global network of integration and support partners. Our knowledgeable account managers and systems engineers will work with you to ensure that you are provided with a solution that is optimal for your needs. Our world class integration, installation and support team is well recognized in the industry for our exceptional customization capabilities and installation craftsmanship.

Our industry-leading Customer Support Group is a team of experienced field service technicians available 24/7. Our team is also available to travel to your site to quickly resolve any service issues. They are also available for routine maintenance, equipment installation, proof of performance testing and product training.

**Our professional support is available by phone 1-800-215-2614
or +1 724-873-8100 or email: service@axcera.com**

At Axcera we look forward to the opportunity to demonstrate our commitment to your total happiness with our products and services.



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the **rf** experts

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