The fastest way to wireless.

Size, speed, range, power consumption and cost are all important issues to engineers integrating RF connectivity. AeroComm addresses these issues with compact 2.4GHz, 900MHz & 868MHz transceivers. Designed for fast OEM integration, our radios suit applications where *both* high reliability *and* long range are essential.

AeroComm's Design Kits provide a complete development environment to help engineers get up and running with our solutions in a matter of minutes. Each system includes the transceivers and accessories required to install and test RF, allowing for reduced R&D costs, quick agency certification and fast time to market.

Design Kits are not just for engineers working with tight resources, limited time or varying experience—all OEMs can benefit from our comprehensive tools and highly technical expertise in the complex field of RF.

✓ **Testing and tuning antennas**   ✓ **Hardware and software integration**

✓ **Increasing transmission range**   ✓ **Finding best mode for data rate & network**

✓ **Optimizing system timing**   ✓ **Finding best configuration for application**

✓ **Mechanical engineering**   ✓ **Help with agency certification**

System Contents

Two (2) Transceivers	Choose from AeroComm's 2.4GHz, 900MHz or 868MHz kits. Market-ready modules help you to determine actual transmission range for your application, evaluate data throughput in the field, and choose best mechanical fit.
Two (2) Adapter Boards	RS232, RS485, 5V/3.3V serial TTL and USB interfaces supported. More features include: 1) loop-back feature for distance-testing using one computer, 2) status/communications LED indicators, 3) switches for easy configuration & reset, 4) test points for troubleshooting.
One (1) Utilities CD	Script-driven utilities include: 1) transmit/receive emulator, 2) single-line command interface, 3) EEPROM viewer/editor; configuration information storage file, 4) "What's This?" Help File format provides description of each configuration option, 5) error-checking prevents configuration errors.
Two (2) AC Power Adapters	Power for adapter board & transceiver. USB & battery power optional.
Two (2) DB9 Serial Cables	Connect the adapter board to PC via DB9.
Two (2) USB Cables	Connect the adapter board to PC via USB.
Two (2) Dipole Antennas	Convenient, small, cost-efficient dipole antennas plug directly into transceiver's MMCX connector; longer-range antennas available.
Engineering Expertise	AeroComm's team is available to assist with development, integration, and agency certification processes.

Design Kit Features

Software

In an easy menu-driven format, our Windows-compatible software provides several helpful development utilities, allowing OEMs to quickly begin performing tests for configuration modes, range measurements, antenna evaluations, power management and data throughput. Plus, designers can easily program the transceivers to any desired configuration with the EEPROM Viewer/Editor feature.

Configuration

All AeroComm transceivers have configuration parameters stored in EEPROM that are used to customize the Serial Interface Mode and provide for general system setup. The modules ship with default parameters already configured to enable plug-and-play; these can be changed using our development tools or with custom interfaces developed by the OEM.

Antennas

Antenna type, gain and location are among the most critical elements of a wireless system. AeroComm's Design Kit allows OEMs to connect different antennas and evaluate their performance in various situations. In addition, our engineers can provide a comprehensive antenna review during the design process to determine the best antenna and location for the application.

Compliance

RF products are required to meet regulatory compliance such as FCC (USA), IC (Canada), ETSI (Europe). Our transceiver approvals will help eliminate significant costs and time, yet regulatory compliance is still required for the final product. AeroComm's experts can help guide OEMs through the approval process.

Ordering Information

Select a frequency band and feature set from the list below to identify the appropriate part number. All AeroComm Design Kits are available for the same low price. Contact a Sales Representative for details: toll-free 1-800-492-2320, email sales@aerocomm.com.

2.4GHz SYSTEMS:

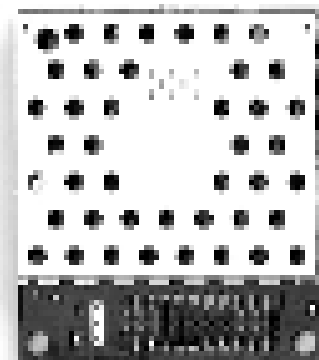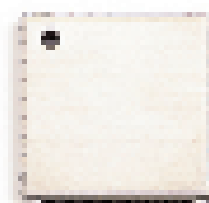|	
AC5124 transceivers, -40º to +80ºC, 5V, TTL serial interface, MMCX antenna connector, 200mW power output	SDK-AC5124-200
AC5124 transceivers, -40º to +80ºC, 5V, TTL serial interface, MMCX antenna connector, 10mW power output	SDK-AC5124-10
AC5124 transceivers, -40º to +80ºC, 5V, TTL serial interface, integral antenna, 10mW power output, integral antenna	SDK-AC5124-10A
AC4424 transceivers, -40º to +80ºC, 5V, TTL serial interface, MMCX antenna connector, 200mW power output	SDK-AC4424-200
AC4424 transceivers, -40º to +80ºC, 5V, TTL serial interface, MMCX antenna connector, 100mW power output	SDK-AC4424-100
AC4424 transceivers, -40º to +80ºC, 5V, TTL serial interface, MMCX antenna connector, 10mW power output	SDK-AC4424-10
AC4424 transceivers, -40º to +80ºC, 5V, TTL serial interface, integral antenna, 10mW power output	SDK-AC4424-10A

2.4GHz Models
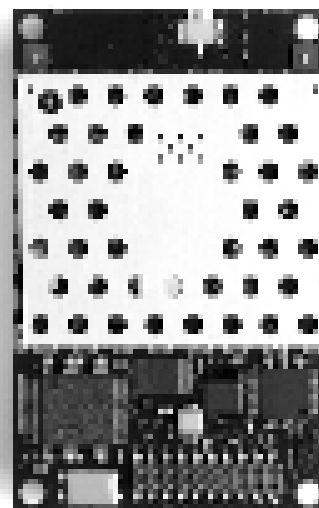
900MHz SYSTEMS:

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AC4790 transceivers, -40º to +80ºC, 3.3V, TTL serial interface, MMCX antenna connector, 5mW–1000mW variable power output	SDK-AC4790-1000M
AC4790 transceivers, -40º to +80ºC, 3.3V-5.5V, TTL serial interface, MMCX antenna connector, 5mW–200mW variable power output	SDK-AC4790-200M
AC4790 transceivers, -40º to +80ºC, 3.3V-5.5V, TTL serial interface, integral antenna, 5mW–200mW variable power output	SDK-AC4790-200A
AC4790-1x1 tiny transceivers, -40º to +80ºC, 3.3V, TTL serial interface, 10mW variable power output	SDK-AC4790-1x1
AC4490 transceivers, -40º to +80ºC, 3.3V, TTL serial interface, MMCX antenna connector, 5mW–1000mW variable power output	SDK-AC4490-1000M
AC4490 transceivers, -40º to +80ºC, 3.3V-5.5V, TTL serial interface, MMCX antenna connector, 5mW–200mW variable power output	SDK-AC4490-200M
AC4490 transceivers, -40º to +80ºC, 3.3V-5.5V, TTL serial interface, integral antenna, 5mW–200mW variable power output	SDK-AC4490-200A
AC4490-1x1 tiny transceivers, -40º to +80ºC, 3.3V, TTL serial interface, 10mW variable power output	SDK-AC4490-1x1

900/868MHz Models

## 868MHz SYSTEMS:

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AC4868 transceivers, -40º to +80ºC, 3.3V, TTL serial interface, MMCX antenna connector, 5–250mW power output	SDK-AC4868-250M
AC4486 transceivers, -40º to +80ºC, 3.3V-5.5V, TTL serial interface, integral antenna, 5mW power output	SDK-AC4486-5A
AC4486 transceivers, -40º to +80ºC, 3.3V-5.5V, TTL serial interface, MMCX antenna, 5mW power output	SDK-AC4486-5M

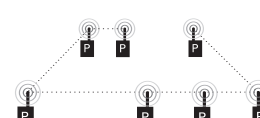1x1-inch Models
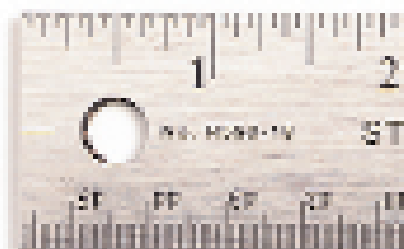
RF Architectures
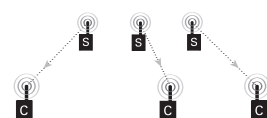
Point-to-point
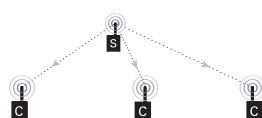
Point-to-multipoint
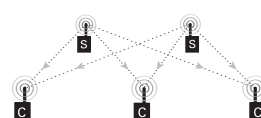
Multipoint-to-multipoint

Peer-to-peer