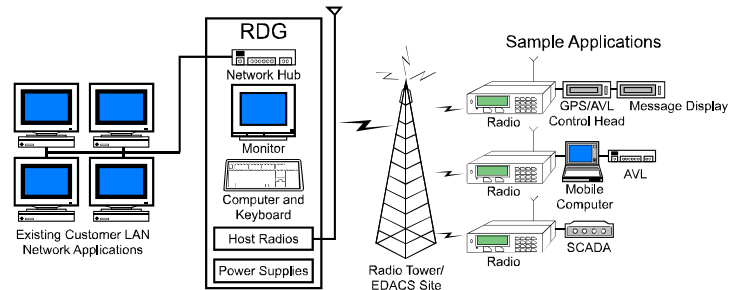


Implementing data on an Enhanced Digital Access Communications System (EDACS) or ProVoice System can be easy when using the RF Data Gateway and M/A-COM's Data Systems Solution Services. The RF Data Gateway (RDG) simplifies the implementation of data applications by

- Providing industry standard host and remote data interfaces.
- Delivering compatibility with off-the-shelf hardware or software products.
- Reducing the development time of wireless data applications.

Each benefit results in considerable savings in development cost. With the RDG, explore the benefits of wireless data without a major investment of money or resources.



Product Overview

M/A-COM's RF Data Gateway (RDG) is an open architecture, wireless data solution for a single-site or simulcast trunked system. The RDG reduces the cost and time of implementing data communications over an EDACS or ProVoice infrastructure and requires no expensive upgrades to the system.

The RDG is available in a 2-port or 4-port configuration. The 2-port RDG allows up to 2 simultaneous data calls, while the 4-port allows up to 4 simultaneous data calls. Each port (RF control station) can be configured to transmit and receive data calls or be partitioned into any combination of transmit-only or receive-only radios.

Open Architecture

The use of standard computer interfaces on the EDACS/ProVoice-to-host interface as well as the EDACS/ProVoice-to-mobile computer interface simplifies integration. The RDG features a rack-mounted, industrial grade PC utilizing the Windows[®] 2000 operating system. It allows the use of off-the-shelf software and hardware,

which greatly reduces integration time and cost.

Protocol Translation

The RDG provides truly transparent Internet Protocol (IP) network connectivity. Network device driver software accepts standard IP packets and performs all translations between the language of the radio system and the language of the host network.

Reliable Operation

Large messages containing long strings of either binary zeroes or ones can bias a radio, causing an increase in failed messages. The RDG features M/A-COM's patented Bias Reduction Encoding (BREN), an antibiasing algorithm that greatly improves the reliability of data messages with minimal impact on call overhead and throughput.

Multiple Upgrade Paths

The RDG allows the user to start small and expand as needs grow. A two-tiered upgrade path allows an easy expansion from 2 ports to 4 ports, on a single-site or simulcast system, and migration from the RF-based RDG to a

powerful, multisite-capable landline data solution using the EDACS Data Gateway (EDG[™]).

Data Lab Services

M/A-COM also offers a fully equipped data laboratory manned by professional data system engineers and technicians that can be utilized to evaluate new or customized data applications prior to live deployment. By utilizing this service, the user's application can be fully evaluated on a test system, allowing our engineers to rigorously exercise it in a controlled manner. This evaluation will provide the data necessary to make recommendations for improvement before the application is utilized on the user's system.

For More Information

For more information about this or any other M/A-COM Wireless Systems product, call toll free in the U.S. 1-800-368-3277. From outside the U.S. call 1-434-455-9223 (Asia Pacific), 1-434-455-9229 (Latin America and Middle East), and 1-434-455-9219 (Europe).

General Specifications

RF Data Gateway/Trunked Interface Physical Layer:

2 or 4 RF control stations
operating 9600 bps over the air
and 9600 bps data links between
RF control station and a system
serial port on wideband channels

RDT/EDACS/ProVoice Interface (Sold Separately):

M/A-COM EDACS Network
Driver
NDIS 4.0/5.0

Data Gateway Host Interface

Physical Layer:

RJ45 Ethernet Connector

Data Link Layer:

Ethernet II (IEEE 802.3)

Network Layer:

Internet Protocol (IP) Version 4

Drives:

Hard drive with Windows® 2000
3-1/2 in. floppy
CD-ROM

Power

RF Data Gateway

AC Input Voltage

Nominal: 115/230 VAC,
50/60 Hz

Range: 90-132/180-264 VAC

Status Indicators:

AC "POWER ON" indicator on
several internal components

Duty Cycle:

100% (continuous duty)

RF Control Station

See appropriate M7100^{IP} instruction
manuals

Power Consumption

Dependent on radio

Cabinet Fan

Power Requirements:

115 VAC or 220/230 VAC,
1 phase, 50/60 Hz

Air Flow Rate:

550 cfm

Cabinet

Cabinet Colors:

Housing: Light Gray
Trim: Black

Cabinet Dimensions:

Height: 69-1/2 in. (175.5 cm)
Width: 24 in. (61 cm)
Depth: 24 in. (61 cm)

Status and Diagnostics

Drive LEDs:

Disk activity lamps on both
drives

Error Detection:

Run-time statistics logged in a
file

Environmental Specifications

Temperature:

Operating: 32 to 104°F
(0 to 40°C)

Non-Operating: -68 to 185°F
(20 to 85°C)

Humidity: to 95%
noncondensing
(except for
removable
diskette drive)

Regulatory Data

EMI Regulations:

Conforms to FCC 47CFR15
Class A

Safety:

Conforms to EN 60950, UL
1459, and CSA 225

EDACS M7100^{IP} Control Station:

Please refer to data sheets

Approved FCC Part 15

M/A-COM Wireless Systems

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ECR-5931D

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