

# RCMS

## Radio Control Modular System



### THE ACAT 2210™

### MASTER CONTROL MODULE

The ACAT2210™ Master Control Module is the heart of the Radio Control Modular System, RCMS™. Providing RF communication with both a control center and other remote stations, the ACAT2210™ forms the core of sophisticated radio control system for both monitoring and control function. The ACAT2210™ utilizes state-of-the-art technologies, such as high speed CMOS microprocessors and surface mount devices (SMD), to ensure high performance levels and reliability.

It can operate as a stand-alone remote unit using its built-in eight status inputs and two control outputs, or can be easily expanded via a simple flat cable to 64 inputs and 64 outputs by adding ACATSI8™ (8 status inputs) and ACATCO8™ (8 control outputs) expansion modules. Analog inputs and Analog outputs modules are also available. The built-in FM RF transceiver enables the ACAT2210™ to maintain constant contact with other remote stations or with a control center. The ACAT2210™ transmits a digital message report whenever a change of state (COS) condition occurs at any of the status inputs. The ACAT2210™ FM receiver allows it to receive an acknowledgement of the message as well as periodic interrogations from the control center. The ACAT2210™ is designed with the user in mind. Installation is simple, using the mounting bracket enclosed with the unit. To set the unit cover and set the DIP switches according to easy to use charts. The ACAT2210™ offers you reliable and dependable remote station of the Radio Control Modular System-RCMS™.

## SPECIFICATIONS:

### ACAT2210™ Master Control Module

#### General:

Mechanical Dimensions: 9.625"(245mm) Height  
4"(100mm) Width  
2.125"(53mm) Depth

Weight 2.2 LBS (1 kg)

Operation Temperature -20°C to 60°C

Relative Humidity 90%(without condensation)

#### Power supply:

Operating Voltage : 10-15 VDC

Current Consumption: 1A during TX, 30mA STBY Battery

Charger: 13.7V , 180mA MAX

#### Digital Encoder/Decoder:

Address Capacity: 2048 Stations in 4 systems

Baud Rate: 600

Word Format 32 bits with BCH and parity

#### Inputs:

Status Inputs: 8, <3KΩ= CLOSED  
>40KΩ= OPEN

Input Expansion: up to 64

Transient Protection 2.5KV (IEEE 472)

#### Outputs:

Control Outputs: 2, Open Drain 60VDC,  
70mA

Output Expansion: Up to 64 dry contact relays

#### Transmitter:

Frequency: VHF: 136-174 MHz,  
MB: 66-88 MHz,  
UHF: 403-512 MHz (optional)

Modulation: FM, FSK 900, 1500Hz +PWM

Bandwidth: 25KHz/12.5KHz

RF output @ 12.5VDC: 5W

Frequency Stability ±5ppm

Spurious & Harmonics -50dB

Output Impedance: 50Ω

#### Receiver:

Channel Spacing: 25KHz/12.5KHz (optional)

Spurious & Image

Rejection: 65dB min

Frequency Stability: ±10 ppm

Selectivity (12db SINAD) >65 dB @±25KHz

Sensitivity (12db SINAD) 0.35 micro V

### ACATO8™ Control Outputs Expansion Module

#### Power supply:

Operating Voltage: 10-15VDC supplied  
From the  
ACAT2210 via the  
flat Cable.

Current Consumption: 10mA STBY  
20mA Max

#### Outputs:

Outputs Type: 8, Dry Contact Bistable  
Relays.

Contact Rating: 250 VAC, 2A max

Relay Mode: Programmable Latched,  
Common Latched, or  
Momentary .

Momentary Time: 2 Seconds

### ACATS18™ Status Inputs Expansion Module

#### Power supply:

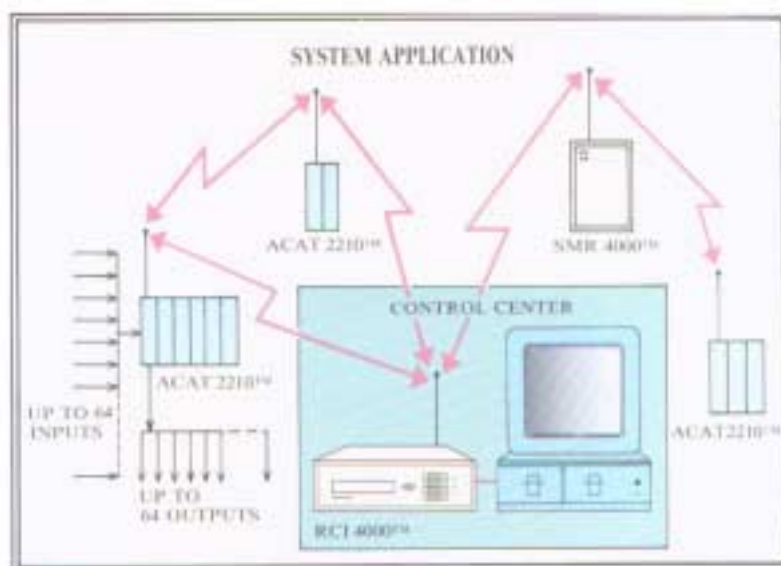
Operating Voltage: 10-15VDC  
supplied  
From the  
ACAT2210 via  
the flat Cable.

Current Consumption: 10mSTBY  
20mA Max

#### Inputs:

Status Inputs: 8, <3KΩ=CLOSED  
>40KΩ= OPEN

COS polarity: Programmable per  
input masked, open to  
close, close to open or  
bipolar.



## RCMS™ Takes control

For More information, please contact:

**KP ELECTRONIC  
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Frequency: VHF: 136-174 MHz,  
MB: 66-88 MHz,  
UHF: 403-512 MHz  
(optional)

Input Impedance: 50Ω