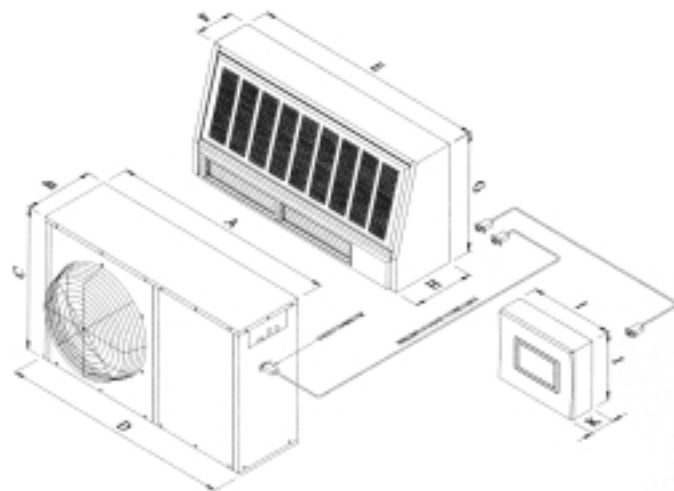


**series seven specifications** (air cooled)

60 Hz data in BtuH at 75°F. and 50% R.H., 95°F. ambient. / 50 Hz data in KW at 27°C. and 48% R.H., 35°C. ambient.

INDOOR UNIT - Model	7AI15	7AI20	7AI25
Total Capacity (BtuH/KW)	19,026 / 5.64	20,713 / 6.62	27,902 / 8.15
Sensible Capacity (BtuH/KW)	17,010 / 5.39	18,905 / 6.35	26,040 / 8.15
Nominal Air Volume (CFM)	800	900	1,300
Electrical	208-230/1/50-60	208-230/1/50-60	208-230/1/50-60
Approx. Weight (Lbs./Kg.)	95/43	95/43	95/43
CONDENSING UNIT - Model	7AO15	7AO20	7AO25
Electrical	208-230/1/50-60	208-230/1/50-60	208-230/1/50-60
Approx. Weight (Lbs./Kg.)	145/66	145/66	145/66

Dimension	in.	mm.
A	40 1/4	1021
B	12 1/4	310
C	25 1/8	638
D	41 1/4	1046
E	42	1067
F	6 11/16	170
G	21	533
H	10 13/16	275
I	10	254
J	8	203
K	2 1/2	64



**Nomenclature**

Series	7
System	A = Air Cooled W = Water Cooled G = Glycol Cooled C = Chilled Water
Device	I = Indoor Unit O = Outdoor Unit
Capacity	15 = 1.5 Ton 20 = 2 Ton 25 = 2.5 Ton
Voltage	U = 208/230-1-60 W = 208/230-3-60 for 2.5 ton, outdoor only
Reheat	X = Electric = Not Applicable
Condensate	X = P = Condensate Pump = Not Applicable
Controller	M = Co-Work A = Alternate S = Slave Unit
Humidifier	H = Humidifier X = Not Applicable
Low Ambient	X = L = Low Ambient = Not Applicable
Special	X = S = Special

**features**

**Controller**

- Network ready Advanced Microprocessor in master unit
- Separate wall mounted touch activated LCD display
- PID control logic
- Alarm and event log
- Graphic trending of temperature and humidity
- Continuous room and unit status
- Other optional controllers available

**Cooling System**

- Available in air, water, glycol DX, or chilled water cooling
- High EER scroll compressor
- Positive start for winter start-up
- High efficiency slab Aluminum fin copper tube coil
- Stainless steel drain pan
- Available for R22 or R407C refrigerant
- High and low pressure cutout protection

- Thermostatic expansion valve, sight glass, filter drier
- Condensing unit horizontal discharge design with axial direct-drive fan and copper tube aluminum fin coil
- Compact, tube-in-tube liquid cooled condenser with two-way pressure regulating valve

**Dust Control**

- UL 2 pleated 1" disposable filters with 30% efficiency to ASHRAE 52-76

**System Housing**

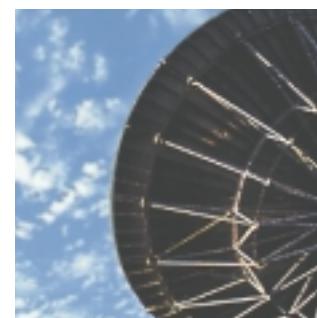
- Indoor unit and liquid condensing units are heavy gauge steel, finished with durable epoxy powder paint. Air condensing unit constructed of heavy gauge aluminum.

**Options**

- Low Ambient Control • Electric Reheat • Condensate Pump
- Three-way Water valve • Humidifier • Liquid Detection
- Firestat • Smoke Detector



**intelligent precision air conditioning systems**



**ISO 9001**



Canatal International Incorporated  
2775 Slough Street  
Mississauga, ON Canada L4T 1G2  
Tel: 905-405-0800 Fax: 905-405-0807  
www.canatal.com



**ISO 9001**

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In the interest of continuous improvement,  
Canatal reserves the right to change  
specifications without notice.





precision air conditioning

*If only your machines could talk*

Your electronic equipment comprises the central nervous system of your business. In some ways it is more sensitive than people. These carefully calibrated instruments are less tolerant of changes in temperature, humidity and dust than the people who designed them. If they could speak for themselves, they would tell you this. But they can't. That's our job.

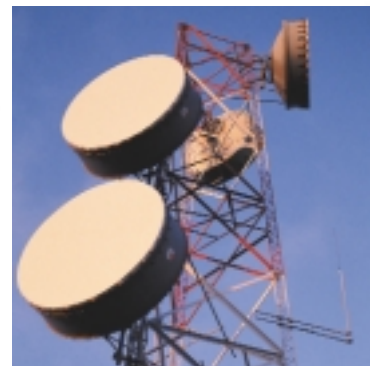
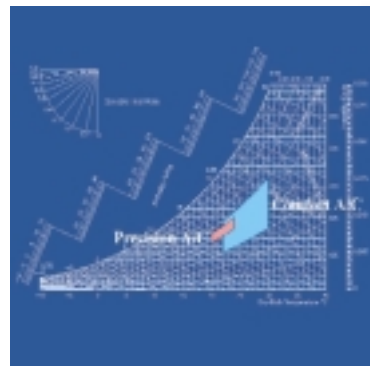
*Precision equipment requires a reliable precision environment*

All air conditioning is not created equal. Offhand, it might seem that installing an everyday comfort air conditioning unit is a wise investment for the cooling needs of your equipment. But familiarity can be deceiving. Though your initial investment may be reduced, so might the life of your mission-critical room applications - and perhaps your company. Unlike people, machines produce sensible heat, which ordinary comfort systems are not designed to handle as effectively as Precision Air Conditioning.

Therefore, with a precision system, you will experience savings on your operating costs and greater reliability with equipment designed to operate 24 hours a day, seven days a week, no matter what the season,

*The Canatal Commitment*

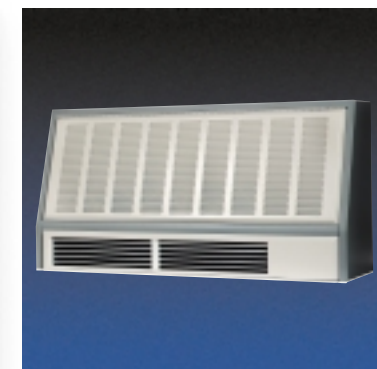
When you select a system from Canatal, you also benefit from years of experience. Canatal International is a member of a worldwide group of companies dedicated to the research, design, manufacture and application of precision air conditioning systems, building automation and environmental engineering. Canatal has drawn on this international base of experience in developing its exceptional precision air conditioning systems. Canatal is ISO-9001 registered with a strong commitment to world-class quality. Extensive and ongoing research and development has resulted in what are considered the market's most advanced and dependable products.



innovation

*The World's 1st True Wall-mounted Split Precision Air Conditioning System*

The Series 7 allows for efficient use of space, coupled with effective, high-sensible cooling performance, ideally suited for equipment cooling applications. Think telecommunications and other crowded spaces, housing mission critical equipment. Enter Canatal's exclusive Series 7, the world's first and only true compact wall mounted split precision air conditioning system. To make the system even more versatile, the Series 7 is available in air cooled, water cooled and glycol cooled split systems, or with a chilled water coil in 1½, 2 and 2½ ton capacity.





## design

### *Compact Size*

Designed to allow for easy access and installation, while maximizing space in moderate-sized work areas and critical-mission rooms.

### *System Housing*

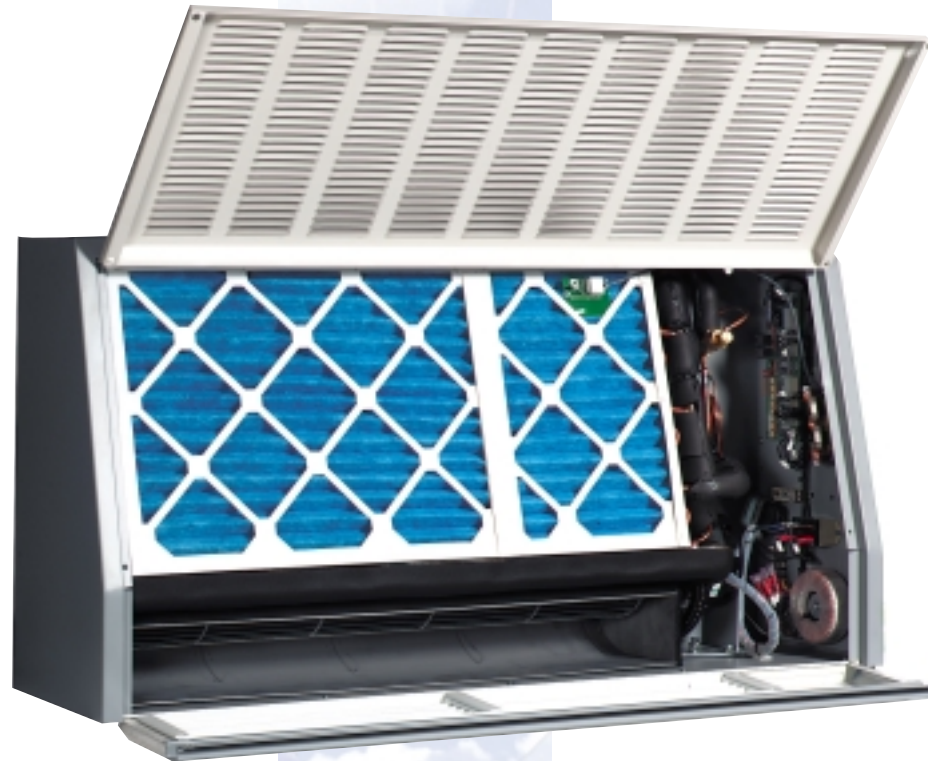
The Series 7 distinguishes itself not only in performance and reliability, but also in construction. The indoor unit's system housing is constructed of heavy gauge steel, and finished with durable epoxy powder paint for maximum strength and durability, internally lined with high density insulation.

### *Hinged Panels*

Provides easy service access to control panel while maintaining minimal clearance to the ceiling.

### *Efficient Cooling*

Slab cooling coil produces 90-95% sensible cooling for efficient equipment cooling.



### *Plug & Play*

Comes complete with simple to connect wiring kit using secured 9-pin D-SUB connections.

### *Fan*

Low noise tangential fan with robust, continuous-duty motor.

### *Louvers*

Horizontally adjustable aluminum supply-air louvers.

### *Drip Pan*

Stainless steel.

### *Filters*

Large-capacity filter chamber covering the entire return air pathway, housing a 1" pleated filter. The filter is replaceable without disturbing unit operation.



### *Intelligence Made Visible*

Canatal's M52 controller features a large, easy to read touch-activated LCD display.

### *Easy to Use*

Simple icons to allow for quick programming and easy to read information.

The main display features continuous room and unit status information available in several languages, expressed in degrees Fahrenheit or Celsius.

### *Precision*

Full P-I-D control logic provides precise environmental control.

### *Graphic Data*

System maintains graphic trending of temperature and humidity data over 24-hour period.

### *Diagnostics*

Detailed diagnostic routines and historic event log that keeps latest 50 events stored allow for easy fault analysis.

### *Alarm Monitoring*

Multiple programmable alarm settings to assure safe operations.

### *Security*

Three levels of security provides for the assignment of different levels of access and protects against unauthorized changes to equipment settings.

### *Communications*

The controller is network ready for up to eight units using the built-in powerful Co-Work network logic and is fully compatible with Canatal-Sachnet Building Automation System.



### *System Housing*

The air-cooled condensing units are constructed of heavy gauge aluminum, while the water-cooled condensing units are made of heavy gauge steel, finished with durable epoxy powder paint.

### *High-efficiency Compressor*

Efficient and reliable scroll compressor is low in vibration and noise.

### *Slim Profile*

Small footprint is ideal for installation into tight spaces.

### *Service Valves*

Quick-connect service valves for easy installation.

### *Condenser Fan*

Low noise propeller with robust, continuous-duty motor.



technology

Co-Work Connectivity

Our controller is at the heart of all of Canatal's product intelligence. Co-Work™ is based on a unique multi-master network system designed by Canatal to maximize performance, reliability and manageability of our precision air conditioning systems. Its six key control functions guarantee the highest possible degree of

on-site connectivity utilizing built-in IIC communication bus. An optional remote mounted panel allows for remote monitoring and control in a LAN environment, common alarm output can be used for automatic dial-up to an emergency service response unit for remote sites.

• **Control Redundancy** means a Co-Work™ network is not dependent on a single designated master controller. Should a master controller experience technical difficulty, the system will automatically assign another controller to take on the master's duties. Therefore, the network actually has 'multiple masters', providing maximum redundancy and added protection.

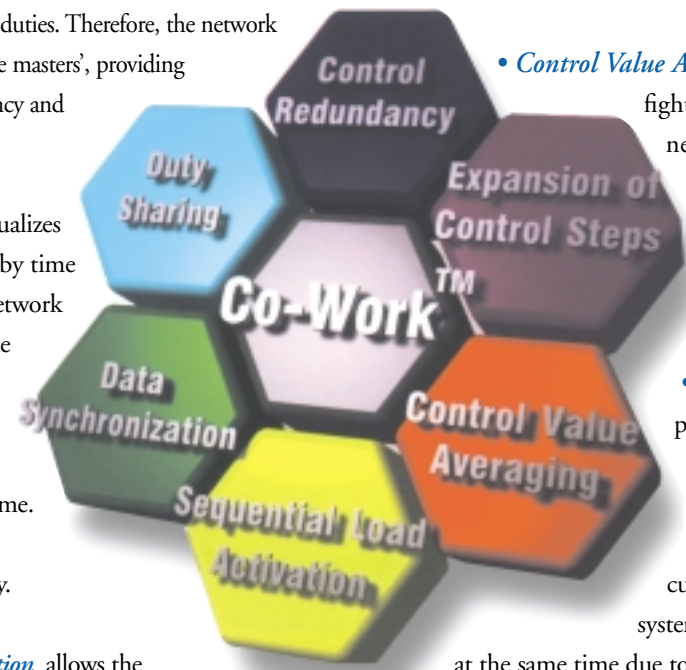
• **Duty sharing** equalizes runtime and standby time for all units in a network by coordinating the operation of standby and duty units based on accumulated runtime. This increases the network's reliability.

• **Data Synchronization** allows the operator to review and change operational data at any random unit in the network. All changes will automatically be communicated and reset across all the units in the network, simplifying operations.

• **Expansion of Control Steps** provides for precise capacity matching with up to 8 steps of control. This means optimum operating efficiency and maximum system reliability.

• **Control Value Averaging** avoids units fighting each other in the network by exchanging and averaging temperature and relative humidity sensor data between units in one space.

• **Sequential Load Activation** provides for a coordinated activation of components for each unit in the network in order to minimize in-rush currents when components in a system are activated or deactivated at the same time due to power disruptions.



flexibility

Take Full Control

The Series 7 was designed with many roles in mind, requiring adaptability to a wide range of control scenarios. The standard controller is our M52, but the system can also be configured for other levels of control. Our solutions range from large network applications with full remote monitoring and control capability, to single unit applications requiring the reliability and efficiency of high-sensible cooling provided by the Series 7, without networking or tight operating control requirements.

Canatal-SatchNet: Complete Central Monitoring and Control System

Our Canatal M52 controller is designed to be compatible with Canatal-SatchNet BAS. Canatal-SatchNet remote monitoring system is your most effective solution for remote surveillance and control. Connected through RS485 serial port communication, Canatal-SatchNet allows for control and monitoring of up to 32 SatchNet compatible devices in a network, expandable to 63 devices per site, to a maximum of 999 remote sites.

Canatal-Siebe Network Control System

Specifically designed for use in cooling-only network applications. Ideally suited for remote telecom container/shelter sites, featuring a common alarm output to be used for automatic dial-up to an emergency service response unit.

