

Mitsubishi CITY MULTI System Overview

The Mitsubishi CITY MULTI zoning system simultaneously cools and heats each zone such that each temperature control zone gets the cooling or heating that's needed at any time. Up to 32 zones can be applied on one central VFD driven condensing unit.

Specifically, the CITY MULTI Y-Series uses an inverter-driven compressor to air-condition up to 32 zones. VFD (Variable Frequency Drive) inverter technology is used to provide the precise amount of cooling or heating to each and every zone. By utilizing T-branches and headers, the Y-Series provides design flexibility that is simple and efficient in application. VFD inverter and heat pump type technology varies the capacity of the system to meet indoor space load requirements while saving energy and providing excellent indoor comfort.

Outdoor condensing Unit

Multiple sizes are available from 72,000 to 234,000 Btu/h, in 208/230 volts, three-phase, 60 Hertz. Each outdoor unit uses Mitsubishi Electric's inverter-driven scroll compressor that is backed by a six-year limited warranty. This compressor is designed and built by Mitsubishi Electric.

Ductless Indoor Units

CITY MULTI's outdoor (PURY-P108TGMU-A) unit can operate multiple ducted indoor units, making the system ideal for school administration buildings that typically have multiple small thermal zones. Conference rooms, administration areas and individual offices are typically too small for individual package units or conventional split systems. CITY MULTI provides precise temperature control in a confined space while eliminating ductwork in the space.

Quiet Operation

CITY MULTI is designed for the quietest possible operation both indoors and out. Outdoor units are as quiet as 56 dB(A) and indoor units as low as 24 dB(A). This system is used in classrooms, schools, universities, hospitals, other healthcare facilities, and libraries, where quiet ambient noise levels are paramount.

History and competitive Offerings

CITY MULTI is the first simultaneous cooling and heating system available in the United States. Mitsubishi's technology has a long, proven track record of quality and reliability. Mitsubishi electric, an acknowledged worldwide industry leader, has deployed CITY MULTI's variable refrigerant flow technology in buildings throughout Europe and elsewhere for nearly twenty years with great success and customer satisfaction. The District has satisfactorily installed Mitsubishi units in various locations throughout the district for over a decade.

Currently, there is no known direct equal to the Mitsubishi CITY MULTI system. Although other manufacturers such as Sanyo, LG, Fujitsu and Daikin currently offer a variation of multiple zone systems, their capacity ranges, specific fancoil offering and sequence of operation and piping arrangements are significantly different and are not of the same grade and quality. In addition, these other manufacturers do not acknowledge or address the need for a direct airside economizer interface as used in Northern California and MDUSD Classroom applications.