

Submittal

RC 108N

The radio amplification unit is typically installed in a centrally located electrical equipment room, or a dedicated ARCS room, which is a 2 hour fire rated room. It is a NEMA 4 rated cabinet that houses the key components of the ARC System. This includes a radio repeater, combiner / duplexer, power supply, sealed lead acid batteries, and data acquisition and monitoring unit. This system requires a 110V 20A direct line with a dedicated service switch and connects directly to the DRC (dedicated radio console CMD-V1) with (2) CAT 5 cables, one for data and one for voice, and a 14/2 cable for 24V DC power.

Key Features

- NEMA 4 enclosure, non ferrous with red powder coat, front and back doors and 3 point locking system, locks via FDNY padlocks.
- NEMA 4 mechanical venting.
- TAIT TB9100 dual channel repeater with P25 capability, dual mode operation, smart AC / DC operation, 5 watt transmit power.
- Cavity combiner / band pass duplexer, 25W output.
- 120V to 24V 10A power supply with UPS unit, built-in battery test function, battery polarity protection.
- Power distribution unit / surge protection with 15A resettable circuit breaker and 1800 joule surge suppressor, active monitoring for ground, surge, and power.
- Data acquisition unit which constantly monitors all system parameters, internet capable for remote monitoring, building management capable for integration into an existing system.
- Antenna and cable monitor accurately monitors antenna and cable system VSWR levels, measures small changes in antenna VSWR with high feeder and interface losses.
- (2) x 110Ah 12V sealed lead acid batteries for 24H reserve power, 6 hour full use power backup.
- Dedicated marked terminals (color coded) for inter-connection to any fire alarm panel (supervisory signals).
- Touch screen on RAU door for local monitoring of alarm conditions, in addition to the remote DRC.
- NYC Fire Department key switch to activate channel 11 and channel 12 on the RAU door, for ease of maintenance, and for redundancy to the DRC.
- Adjustable stainless-steel legs for ease of installation, avoiding the need of a housekeeping pad.

Specifications

Radio Amplification Unit – RC108N		
Volts AC	115V	7.4A
Volts DC	24V	9.0A
Insertion Loss TX	4 Db	
Insertion Loss RX	5 Db	
Frequencies TX	Channel 11 - 483.0125 MHz	Channel 12 - 484.7625 MHz
Frequencies RX	Channel 11 - 486.0125 MHz	Channel 12 - 487.7625 MHz
Ambient Conditions	35° F - 125° F	RH < 90%, non condensing

Warranty – 1 Year Parts and Labor

Dimensions

