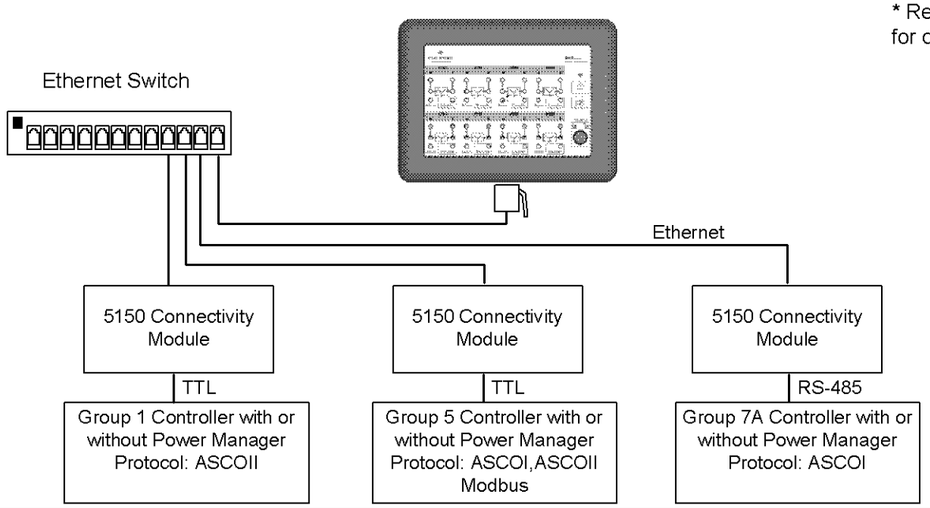
Overall Communication Architecture

Architecture 1: Single ATS Connected to Single Connectivity Module



Ethernet Cable Pinout

Pin	Pair	Wire	Color
1	2	1	White /Orange
2	2	2	Orange
3	3	1	White /Green
4	1	2	Blue
5	1	1	White /Blue
6	3	2	Green
7	4	1	White /Brown
8	4	2	Brown

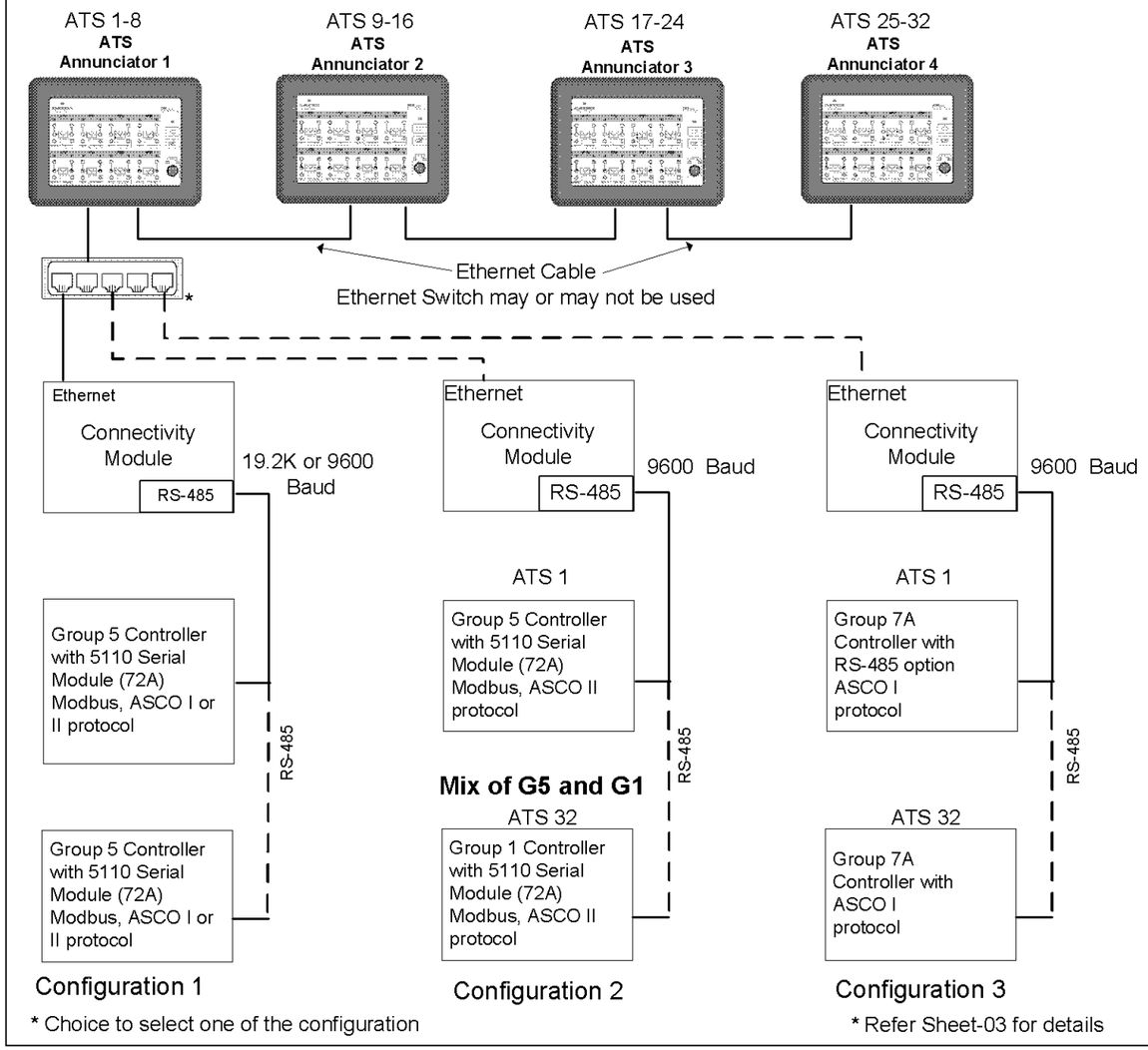
General Notes

Note	Description
1	Each Ethernet device must be configured with its own unique IP address on the network

Sheet Number	Description of Wiring Diagram
1	Overall Communication architecture
2	Architecture 1 Reference Wiring Diagram
3	Architecture 2 Reference Wiring Diagram
4	Power supply and other wiring diagram

LED Label	LED Description	LED Function
POWER	Power on indication Green	Solid ON indicates application software is running
ETH1 & ETH2	LED 1 Green	Solid Green ON indicates network operating at 100Mbps Speed, Full duplex with no collision
		Blinking Green indicates network operating at 100Mbps Speed,Full duplex with collision
	LED 1 Orange	Blinking Orange indicates network operating at half duplex with collision
	LED 1	LED1 is OFF indicates speed and Full duplex/Col signals are not active
	LED 2 Green	Green Blink when Link and Act signals present and indicates TX/RX signals activities
	LED 2 Orange	Solid Orange ON indicates Link is present but no Act signal
	LED 2	LED2 is OFF indicates Link and Act signals are not active

Architecture 2: Serial RS-485 Support via Connectivity Module



Used on Installation Manual 381333-315

CHANGE LETTER	ECN NO.	BY	APPD	DATE
A	223053	SRC	JEH	05/09
-	221797	SRC	JEH	02/09
C	223488	JAV	JEH	08/09
B	223240	JAV	JEH	06/09

PROJECT NAME: XD-1047 - 8CH

WIRING DIAGRAM | DIAGRAM

ATS REMOTE ANNUNCIATOR - 8CH

CAT. 5350

THIRD ANGLE PROJECTION

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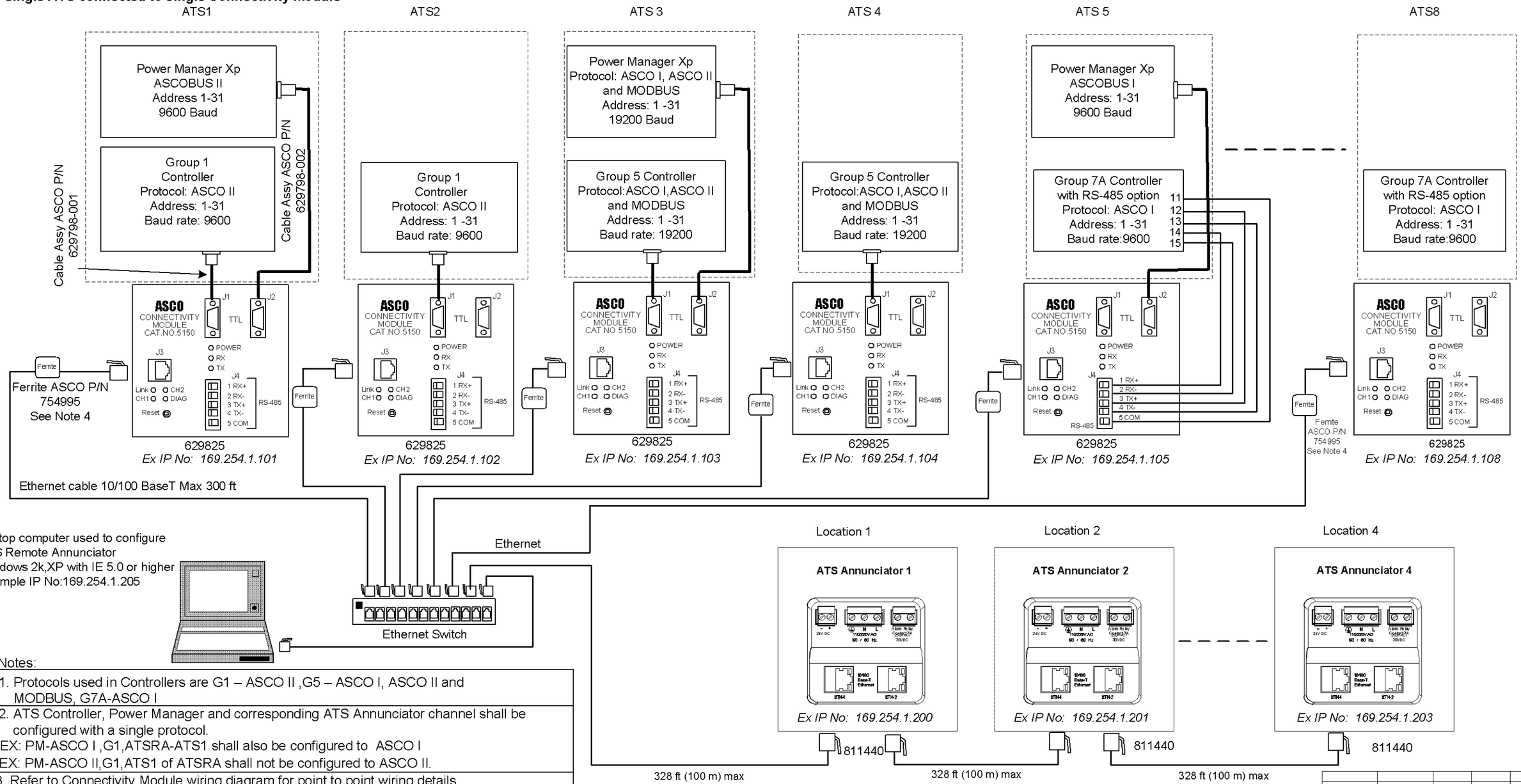
Architecture 1: Reference Wiring Diagram

Single ATS connected to single Connectivity Module

Controller & Power Manager must have unique address when running Modbus protocol



Notes:

1. Protocols used in Controllers are G1 – ASCO II ,G5 – ASCO I, ASCO II and MODBUS, G7A-ASCO I
2. ATS Controller, Power Manager and corresponding ATS Annunciator channel shall be configured with a single protocol.
   EX: PM-ASCO I ,G1,ATSRA-ATS1 shall also be configured to ASCO I
   EX: PM-ASCO II,G1,ATS1 of ATSRA shall not be configured to ASCO II.
3. Refer to Connectivity Module wiring diagram for point to point wiring details
4. Ferrite ASCO P/N 754995 must be installed on cable within 1" of device being connected.

Ethernet Communication Cable

Type	Known as	Max. Length of Segment	Max. Stations per Segment	Cable Type	Connectors	Cable Impedance/ Terminations	Belden P/N (reference)
10 BaseT	Twisted Pair	328ft. (100 meters)	1024	UTP CAT3, 4, 5	RJ-45		7882A

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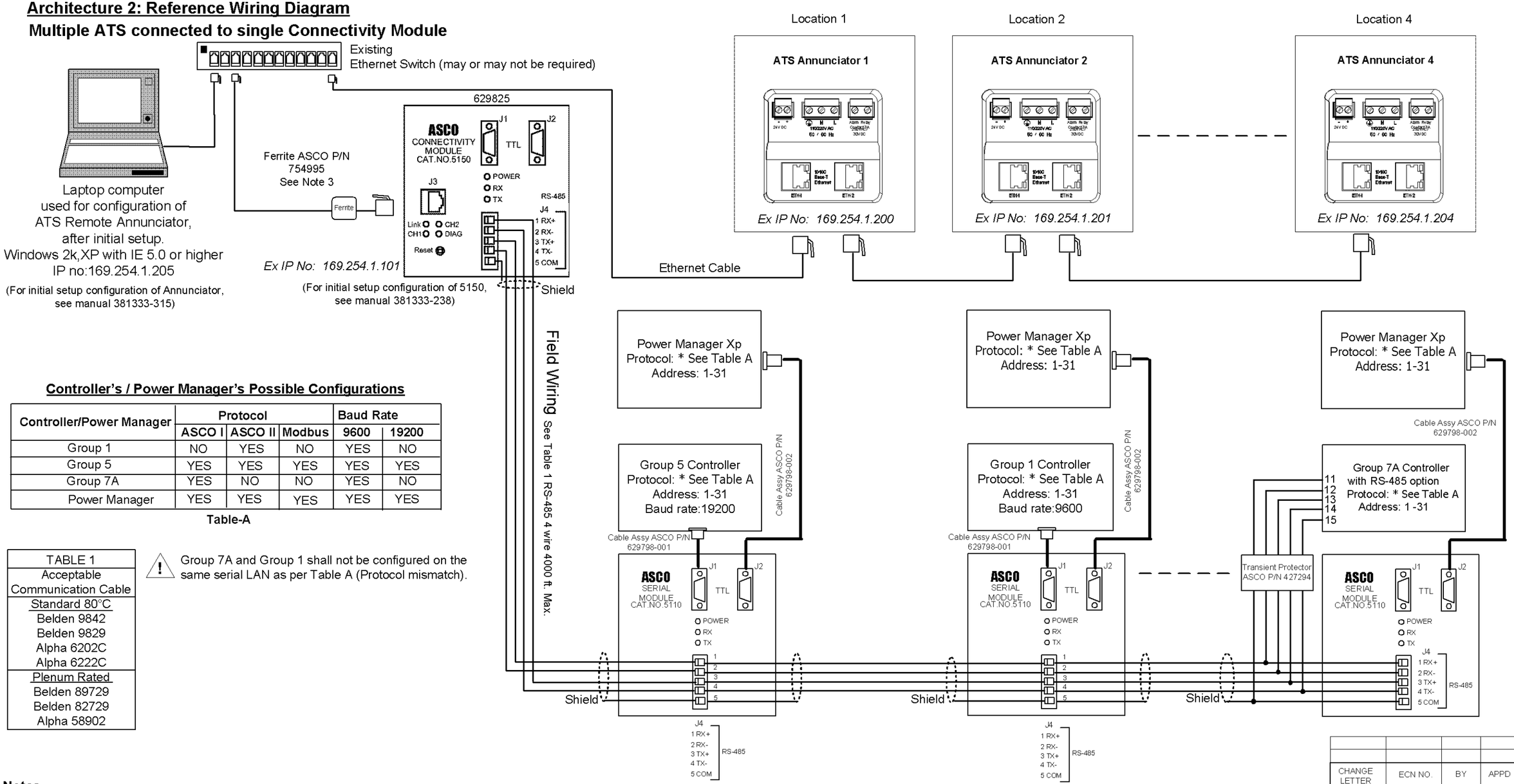
Architecture 2: Reference Wiring Diagram

Multiple ATS connected to single Connectivity Module



Controller's / Power Manager's Possible Configurations

Controller/Power Manager	Protocol			Baud Rate	
	ASCO I	ASCO II	Modbus	9600	19200
Group 1	NO	YES	NO	YES	NO
Group 5	YES	YES	YES	YES	YES
Group 7A	YES	NO	NO	YES	NO
Power Manager	YES	YES	YES	YES	YES

Table-A

TABLE 1
Acceptable Communication Cable
Standard 80°C
Belden 9842
Belden 9829
Alpha 6202C
Alpha 6222C
Plenum Rated
Belden 89729
Belden 82729
Alpha 58902

⚠ Group 7A and Group 1 shall not be configured on the same serial LAN as per Table A (Protocol mismatch).

Notes

1. The possible configurations that can be supported are shown in Table -A.
   'Yes' indicates support and 'No' indicates not supported.
2. Refer to the wiring diagram of connectivity Module for detailed point to point wiring.
3. Ferrite ASCO P/N 754995 must be installed on cable within 1" of device being connected.
4. Enable Termination Resistor at farthest two end devices.
5. When multiple ATS's are connected to a Single Connectivity Module over Serial Configuration, all network device (ATS and Power Manager) baud rates and protocols must match.
6. Each Communication Device must have a unique IP/serial address.

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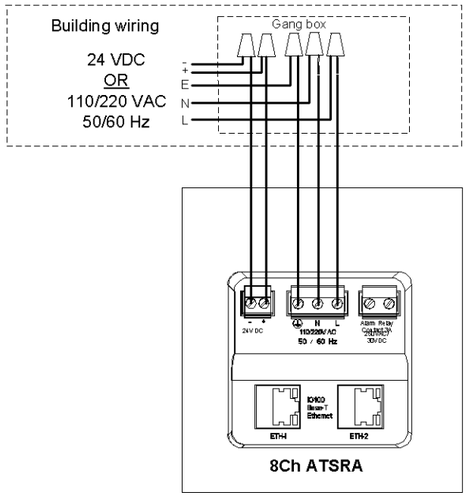
Power supply and other wiring diagram

Eight Channel Annunciator with Gang box mounting

Option-1



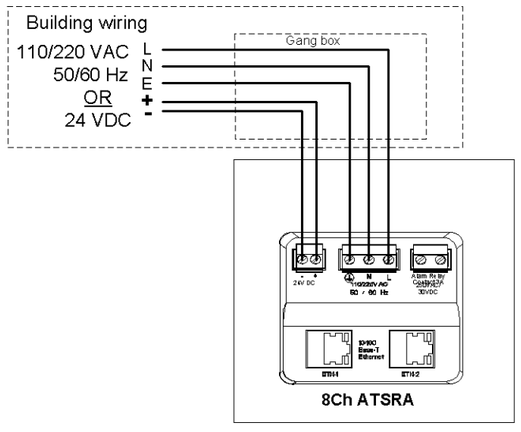
Use Wire nuts supplied for joining the wires

Use the short flexible wires supplied

Wire Description	Color	Connection
Stranded wire #18AWG(16/30)	White	Neutral
	Black	Line
	Green	Earth
Insulated Solid Conductor wire #20AWG	Red	24 VDC +
	Black	GND -

Table B

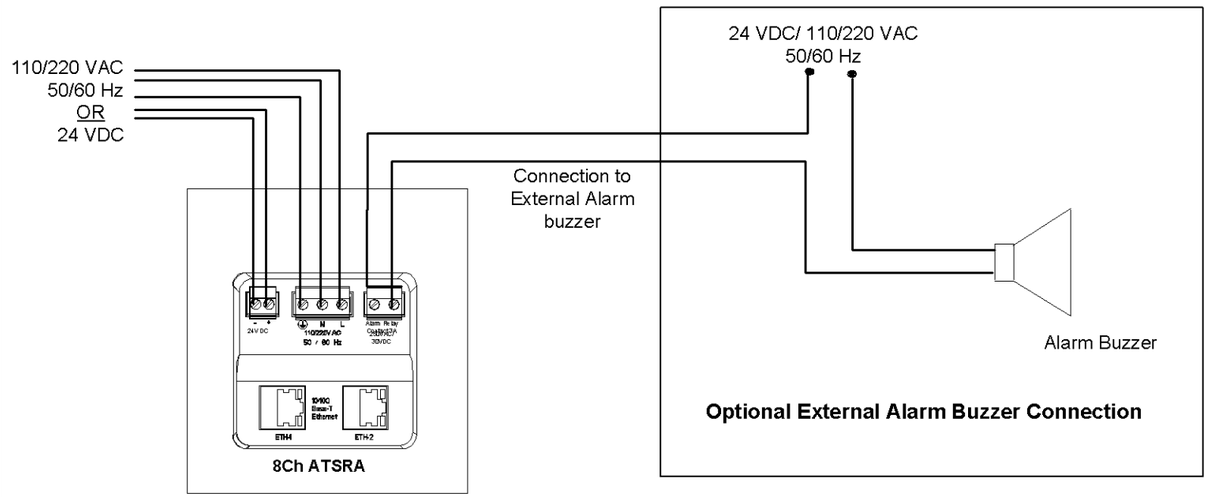
Option-2



Notes

1.**Warning**: Before making the connections ensure the main power is disconnected from the accessible wiring.
2.Option 1: Use wire nuts and short wires for connections, if the wires from the building wiring are not flexible enough to route cable to the Annunciator terminals.
3.Option 2: Do not use wire nuts and short wires for connections, if the wires from the building wiring are flexible enough to route to the Annunciator terminals.
4.The Terminal plugs shall be removed before connecting and shall be plugged to the Annunciator after completion of all connections.
5.Power and communication cables shall be routed in the gang box to maintain a minimum of ¼"(6mm) separation as per NFPA 800.133 Exception 2.
6.Install the divider plate provided to ensure the separation of power and communication cables.
7. Alarm Relay shall not be wired in Gang box mounting arrangement to comply with National Electric Code.
8.In panel mounting arrangement external Alarm/Buzzer can be connected to the Annunciator with suitable external power supply, considering the Alarm/Buzzer specifications and Annunciator Alarm relay contact rating.

Eight Channel Annunciator with Panel Mounting



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