Southwest Microwave, Inc.

Security Systems Division

INTREPID™

SERIES II

RCM II
CM II-N
GCM II-HD
PSM
RPM II SDK
IPP II SDK

System Controller
Communication Configuration Drawings

January 9, 2017

Table of Contents

Section 1 – Controllers

1.1 Controller Options

Section 2 – Relay Control Module II – Typical Communication Configurations

2.1 RCM II - Non-Fault Tolerant Communications

2.2 RCM II - Star Communications

Section 3 – Control Module II-N – Typical Communication Configurations

3.1 CM II-N - Non-Fault Tolerant Communications

3.2 CM II-N - Fault Tolerant Communications

3.3 CM II-N - Star Communications

Section 4 – Graphic Control Module II-HD – Typical Communication Configurations

4.1 GCM II-HD - Non-Fault Tolerant Communications

4.2 GCM II-HD - Fault Tolerant Communications

4.3 GCM II-HD - Star Communications

Section 5 – Perimeter Security Manager – Typical Communication Configurations

5.1 PSM - Non-Fault Tolerant Communications

5.2 PSM - Star Communications

5.3 PSM - Multiple Site Application

Section 6 – Remote Polling Module II/RPM II SDK – Typical Communication Configurations

6.1 RPM II - Non-Fault Tolerant Communications

6.2 RPM II - Fault Tolerant Communications

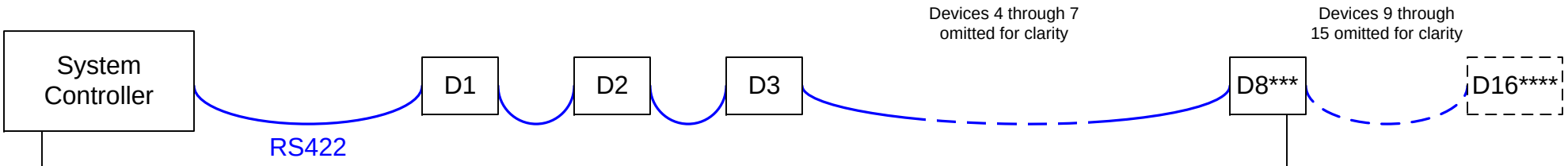
6.3 RPM II - Multiple Site Application

Section 7 – INTREPID Polling Protocol II SDK – Typical Communication Configurations

7.1 IPP II SDK - Non-Fault Tolerant Communications

7.2 IPP II SDK - Fault Tolerant Communications

7.3 IPP II SDK - Star Communications



Any one-(1) of the following controllers:

- Relay Control Module II (RCM II)
- Control Module II-N (CM II-N)
- Graphic Control Module II (GCM II)
- Perimeter Security Manager (PSM)
- Remote Polling Module II (RPM II - SDK)
- IPP II Software Development Kit (SDK)

Devices above can be any combination of the following:

- Relay Output Module (ROM II)
  Available with 8 outputs (ROM II-8) or 16 outputs (ROM II-16)
- Relay Output Module II-16-N (ROM II-16-N)
  16 outputs, remotely located communicating to CM II-N over TCP/IP Network
- MicroPoint II – Processor Module II (PM II)
- MicroTrack II – MicroTrack Processor II (MTP II)
- MicroWave 330 Digital Microwave Link
- Alarm Input Module II (AIM II)
  Ability to monitor 8 discreet inputs

System Controller Specification Chart				
Controller	Ports	Devices	Outputs	Zones
RCM II	1	8	Relays	32
CM II-N	2	16 Local 4 Remote*	Relays	256
GCM II	4	32	Graphic Map Relays ASCII for CCTV	1024
PSM	64	240	Graphic Map CCTV Driver Relays	Unlimited
RPM II** SDK	2	16	Graphic Map Relays	Unlimited 128**
IPP II SDK	Unlimited	Unlimited	Graphic Map Relays	Unlimited

* ROM II-16-N only.
** Requires RPM II Hardware Module. RPM II provides internal 128 Zone Records for backup alarm annunciation via local form-C dry relay outputs.
*** Eight device string provides a 1-second or less alarm delivery time.
**** Sixteen device string provides a 2-second or less alarm delivery time. Not applicable to the RCM II.

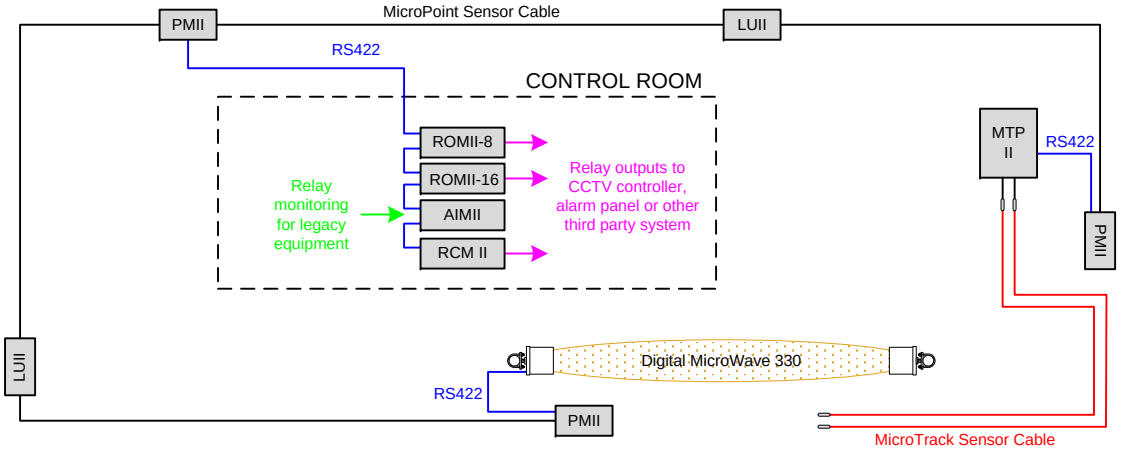
2. Relay Control Module II – Typical Communication Configurations

NOTE: For Clarity Some Equipment Needed For A Complete System May Have Been Omitted

January 9, 2017

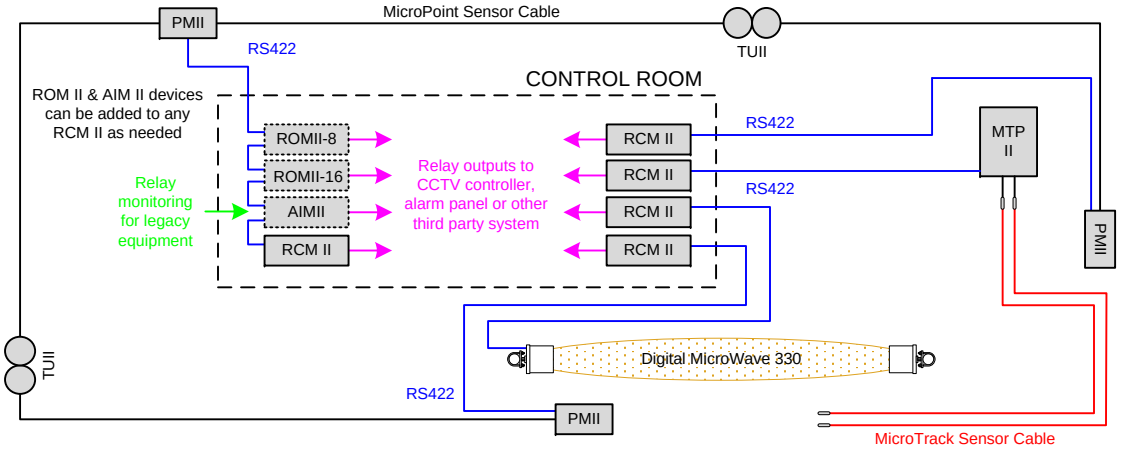
2.1 Non-Fault Tolerant Configuration

- Non-Fault Tolerant communication.
- Maximum Zone Records supported per RCM II = 32
- Maximum devices (PM II, MTP II, MW330, ROM II-8, ROM II-16, AIM II) supported per RCM II = 8
- 1-Second or less alarm delivery time.
- Each PM II provides protection for 1,312 linear feet (400m) of perimeter fence line.
- Each MTP II provides protection for 1,312 linear feet (400m) of perimeter.
- Each MicroWave 330 provides protection for up to 1,500 linear feet (457m) of perimeter.



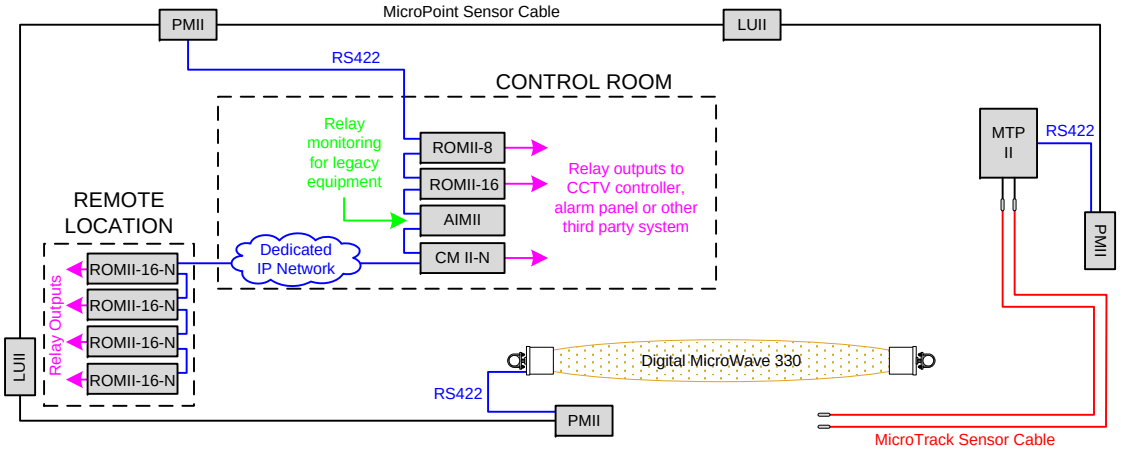
2.2 Star Configuration

- Sensor specifications are the same as those in the Non-Fault Tolerant Configuration but provides the most secure communications path to the RCM II controllers.



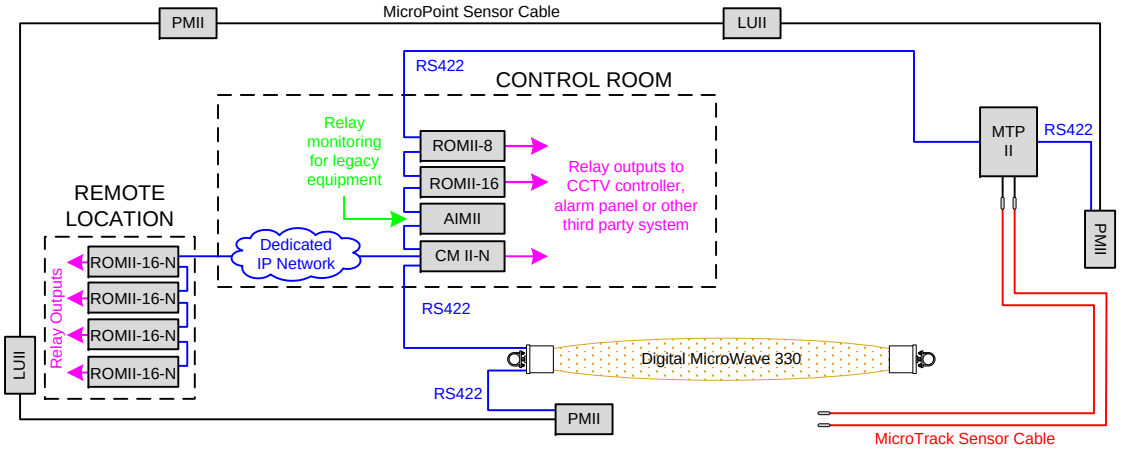
3.1 Non-Fault Tolerant Configuration

- Non-Fault Tolerant communication.
- Maximum Zone Records supported per CM II-N = 256
- Maximum local devices (PM II, MTP II, MW330, ROM II-8, ROM II-16, AIM II) supported per CM II-N = 16
- Maximum remote devices (ROM II-16-N only) supported per CM II-N = 4
- 1-Second or less alarm delivery time when string of devices (PM II, MTP II, MW330, ROM II-8, ROM II-16, AIM II) does not exceed eight on single com-port.
- 2.5-Second or less alarm delivery time when the maximum number of supported local devices (PM II, MTP II, MW330, ROM II-8, ROM II-16, AIM I) are all connected to a single com-port.
- Each PM II provides protection for 1,312 linear feet (400m) of perimeter fence line.
- Each MTP II provides protection for 1,312 linear feet (400m) of perimeter.
- Each MicroWave 330 provides protection for up to 1,500 linear feet (457m) of perimeter.



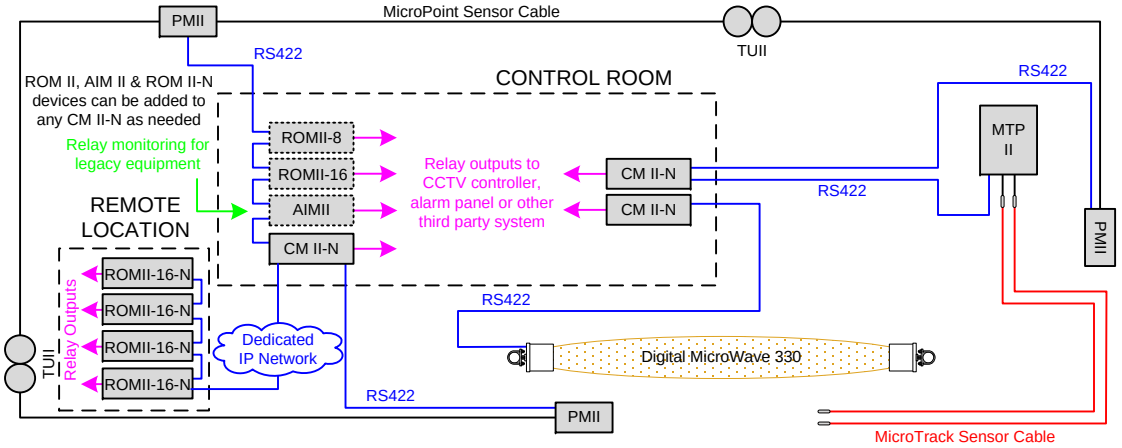
3.2 Fault Tolerant Loop Configuration

- Sensor specifications are the same as those in the Non-Fault Tolerant Configuration but provides Fault Tolerant communications path to the CM II-N controller.



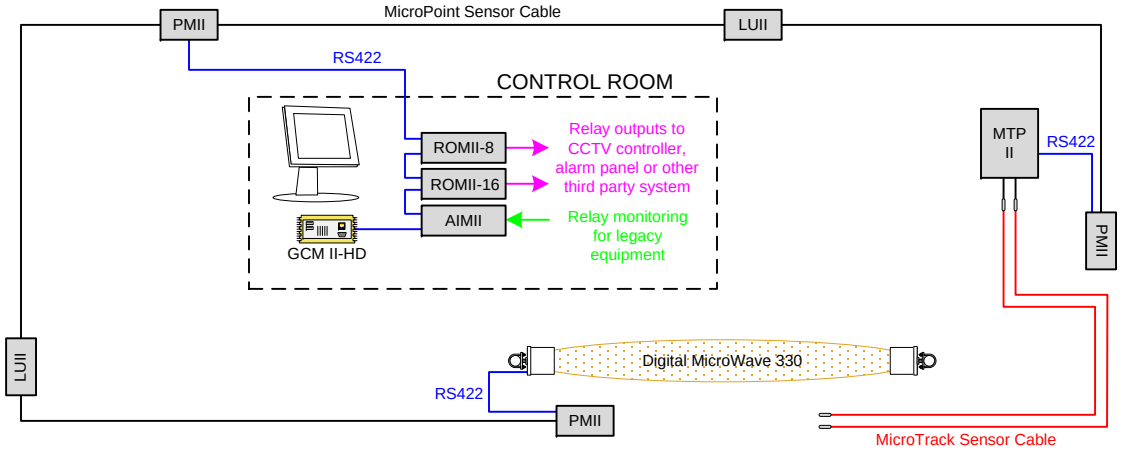
3.3 Star Configuration

- Sensor specifications are the same as those in the Non-Fault Tolerant Configuration but provides the most secure communications path to the CM II-N controllers.



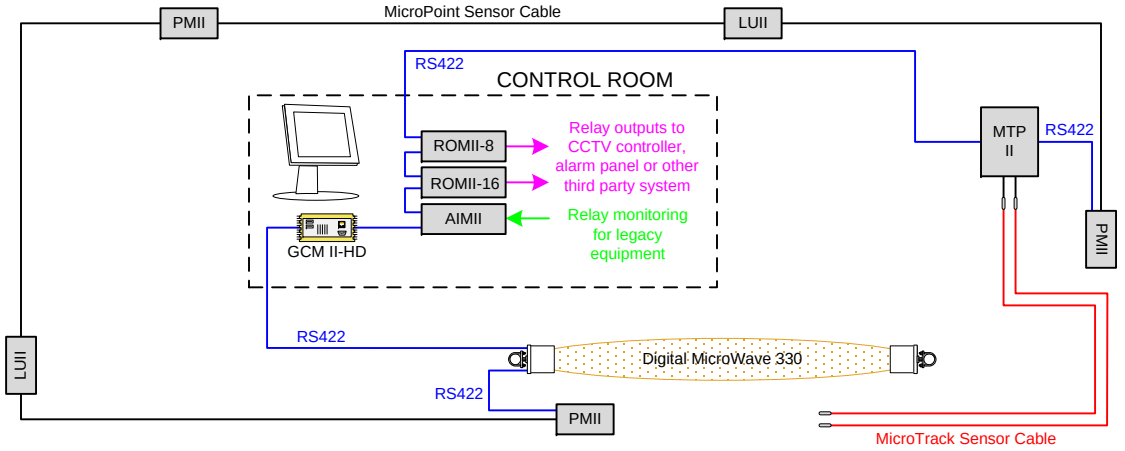
4.1 Non-Fault Tolerant Configuration

- Non-Fault Tolerant communication.
- GCM II-HD provides ASCII output (not shown) for high level CCTV interface.
- Local & remote GCM II-HD and sensor maintenance via on-board Ethernet connection.
- Maximum Zone Records supported per GCM II-HD = 1,024
- Maximum devices (PM II, MTP II, MW330, ROM II-8, ROM II-16, AIM II) supported per GCM II-HD = 32
- 1-Second or less alarm delivery time when string of devices (PM II, MTP II, MW330, ROM II-8, ROM II-16, AIM II) does not exceed eight on single com-port.
- 2.5-Second or less alarm delivery time when string of devices (PM II, MTP II, MW330, ROM II-8, ROM II-16, AIM I) does not exceed sixteen on single com-port.
- Each PM II provides protection for 1,312 linear feet (400m) of perimeter fence line.
- Each MTP II provides protection for 1,312 linear feet (400m) of perimeter.
- Each MicroWave 330 provides protection for up to 1,500 linear feet (457m) of perimeter.



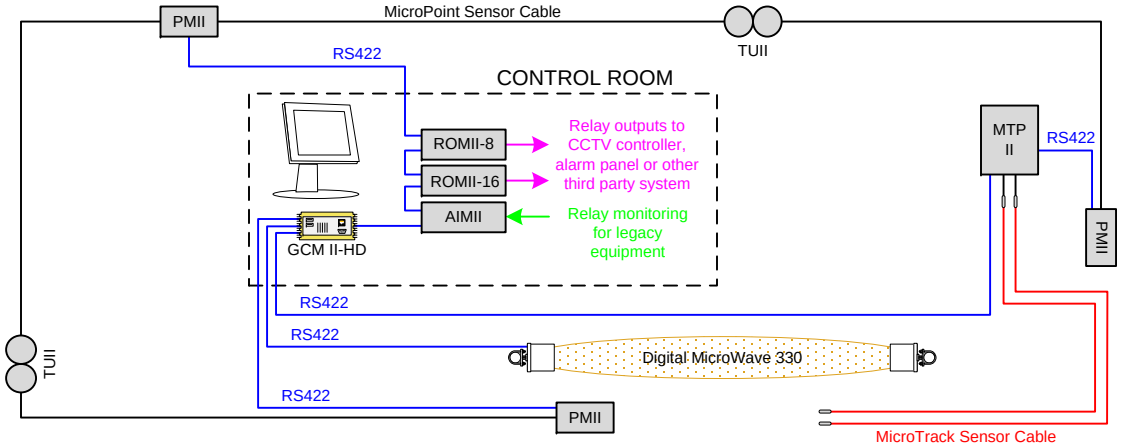
4.2 Fault Tolerant Loop Configuration

- Sensor specifications are the same as those in the Non-Fault Tolerant Configuration but provides Fault Tolerant communications path to the GCM II-HD controller.



4.3 Star Configuration

- Sensor specifications are the same as those in the Non-Fault Tolerant Configuration but provides the most secure communications path to the GCM II-HD controller.



5. Perimeter Security Manager – Typical Communication Configurations

NOTE: For Clarity Some Equipment Needed For A Complete System May Have Been Omitted

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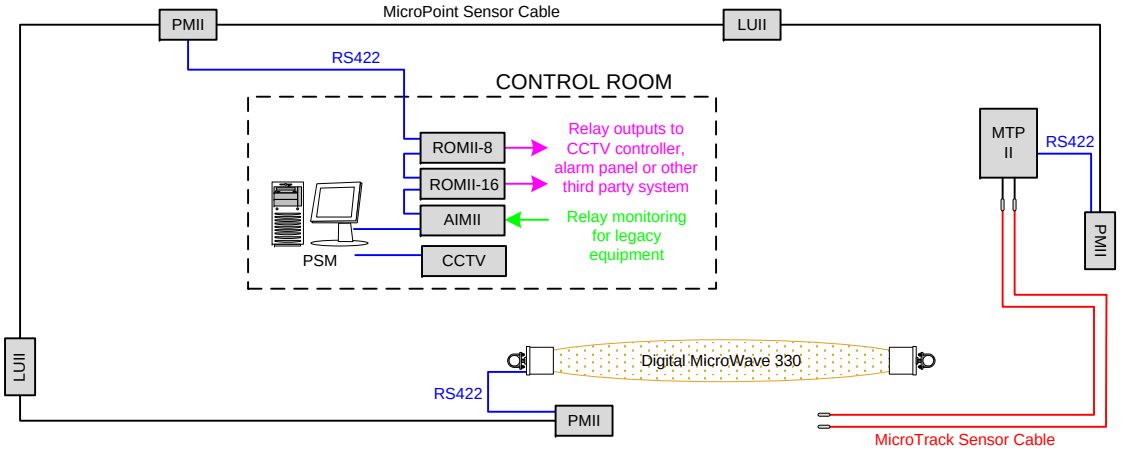
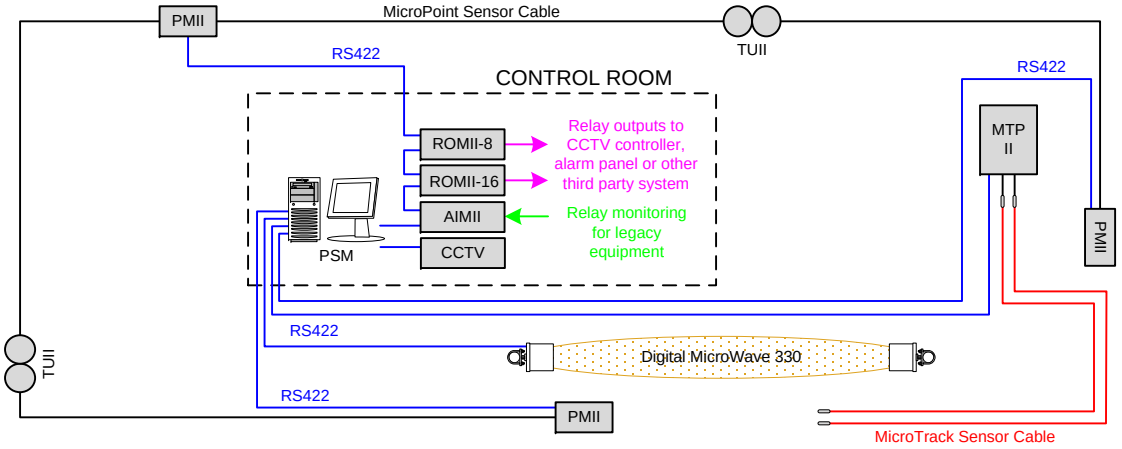
5.1 Non-Fault Tolerant Configuration

- Non-Fault Tolerant communication.
- PSM provides high level serial interface to a wide selection of CCTV matrixes, DVRs & NVRs. Please contact the factory for a list of makes-models and features supported.
- Maximum Zone Records supported = Unlimited
- Maximum devices (PM II, MTP II, MW330, ROM II-8, ROM II-16, AIM II) supported = Unlimited
- 1-Second or less alarm delivery time when string of devices (PM II, MTP II, MW330, ROM II-8, ROM II-16, AIM II) does not exceed eight on single com-port.
- 2.5-Second or less alarm delivery time when string of devices (PM II, MTP II, MW330, ROM II-8, ROM II-16, AIM I) does not exceed sixteen on single com-port.
- Each PM II provides protection for 1,312 linear feet (400m) of perimeter fence line.
- Each MTP II provides protection for 1,312 linear feet (400m) of perimeter.
- Each MicroWave 330 provides protection for up to 1,500 linear feet (457m) of perimeter.



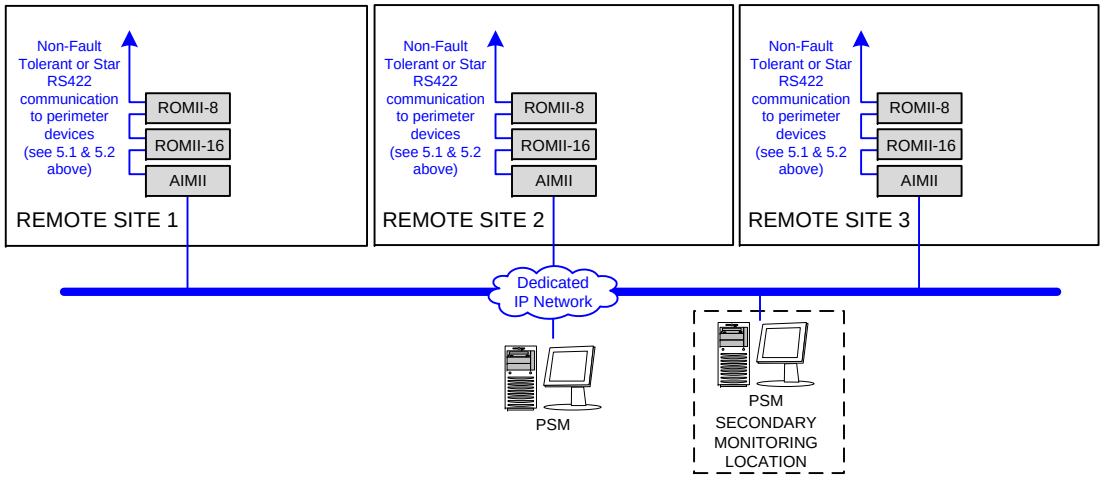
5.2 Star Configuration

- Sensor specifications are the same as those in the Non-Fault Tolerant Configuration but provides the most secure communications path to the PSM controller.
- A PSM system supports a maximum of 64 simultaneous connections. Each connection could be a string of Series II hardware, a CCTV matrix, a DVR or NVR.



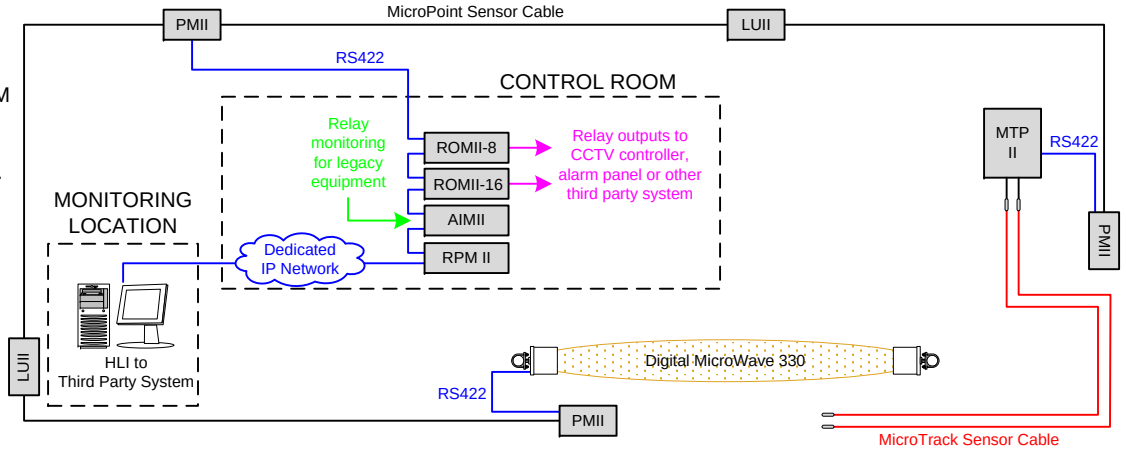
5.3 Multiple Site Application

- PSM Migrating Server must be used when Secondary Monitoring Locations are required.
- PSM Migrating Server supports a maximum of five computers per system.



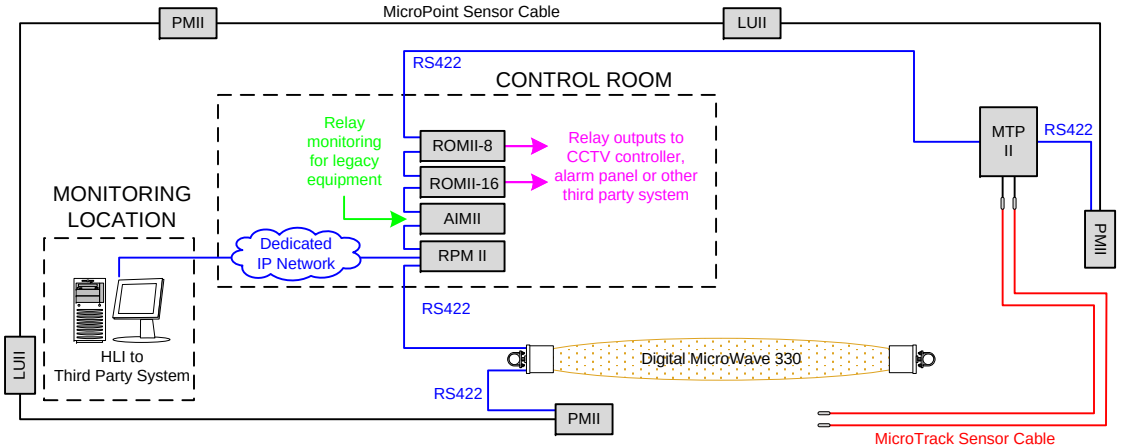
6.1 Non-Fault Tolerant Configuration

- Non-Fault Tolerant communication.
- Please refer to software document 57A46792-A01 for information on the required RPM II SDK.
- Maximum Zone Records supported per RPM II = Unlimited using SDK interface, as backup 128 Zone Records reside in each RPM II (annunciated via form-C outputs).
- Maximum devices (PM II, MTP II, MW330, ROM II-8, ROM II-16, AIM II) supported per RPM II = 16
- 1-Second or less alarm delivery time when string of devices (PM II, MTP II, MW330, ROM II-8, ROM II-16, AIM II) does not exceed eight on single com-port.
- 2.5-Second or less alarm delivery time when the maximum number of supported devices (PM II, MTP II, MW330, ROM II-8, ROM II-16, AIM I) are all connected to a single com-port.
- Each PM II provides protection for 1,312 linear feet (400m) of perimeter fence line.
- Each MTP II provides protection for 1,312 linear feet (400m) of perimeter.
- Each MicroWave 330 provides protection for up to 1,500 linear feet (457m) of perimeter.



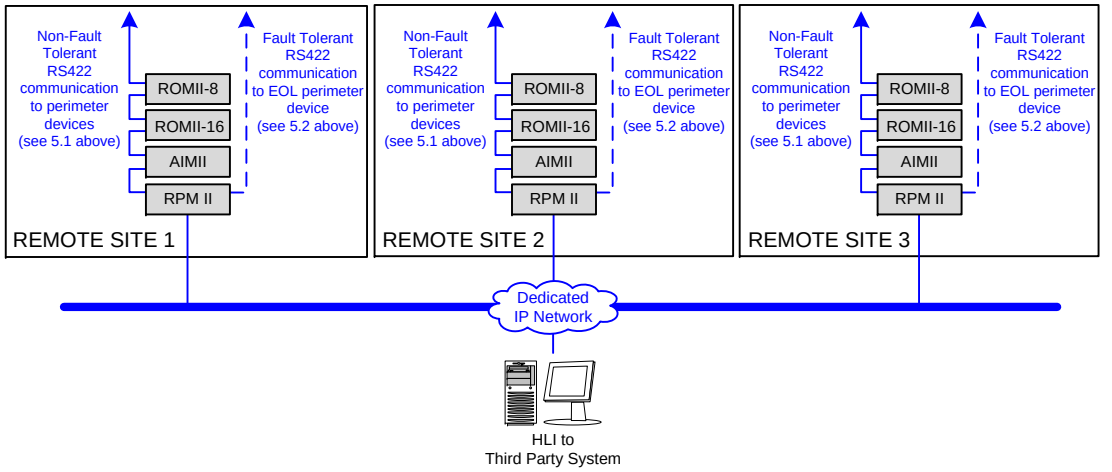
6.2 Fault Tolerant Loop Configuration

- Sensor specifications are the same as those in the Non-Fault Tolerant Configuration but provides Fault Tolerant communications path to the RPM II controller.



6.3 Multiple Site Application

- There is no limit to the number of Series II sites that can be monitored using the RPM II controller.



7.1 Non-Fault Tolerant Configuration

- Non-Fault Tolerant communication.
- Please refer to software document 57A46504-A01 for information on the IPP II SDK.
- Maximum Zone Records supported per IPP II SDK connection = Unlimited
- Maximum devices (PM II, MTP II, MW330, ROM II-8, ROM II-16, AIM II) supported per IPP II SDK connection = Unlimited
- 1-Second or less alarm delivery time when string of devices (PM II, MTP II, MW330, ROM II-8, ROM II-16, AIM II) does not exceed eight on single com-port.
- 2.5-Second or less alarm delivery time when string of devices (PM II, MTP II, MW330, ROM II-8, ROM II-16, AIM I) does not exceed sixteen on single com-port.
- Each PM II provides protection for 1,312 linear feet (400m) of perimeter fence line.
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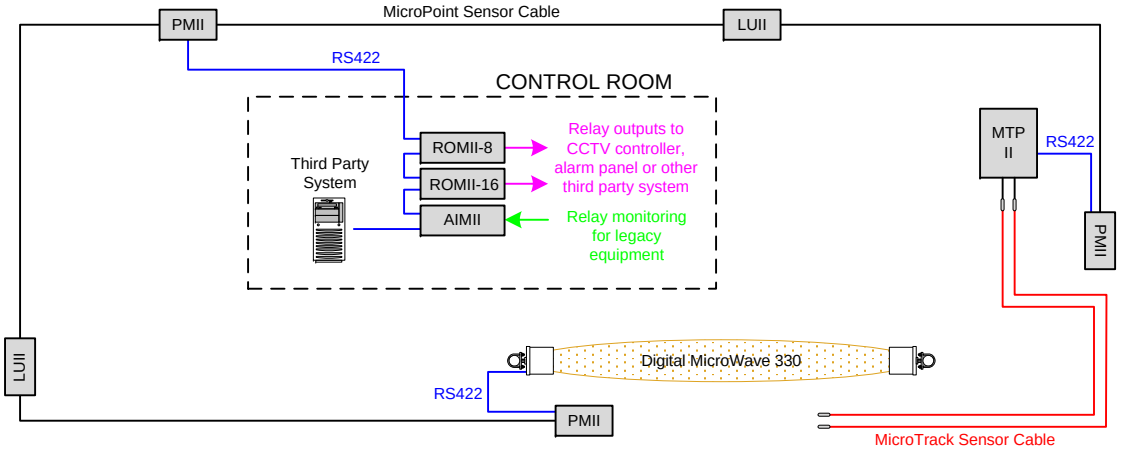
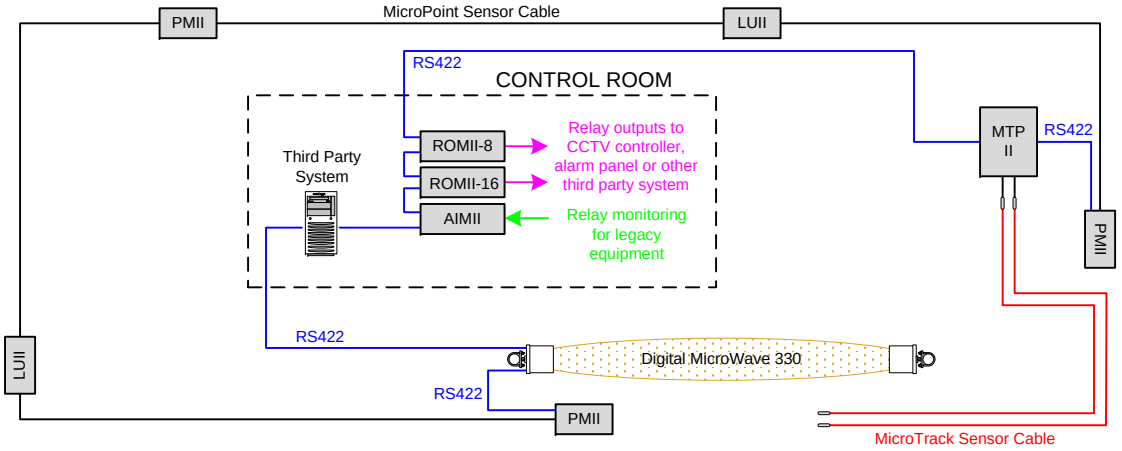
- Each MicroWave 330 provides protection for up to 1,500 linear feet (457m) of perimeter.



7.2 Fault Tolerant Loop Configuration

- Sensor specifications are the same as those in the Non-Fault Tolerant Configuration but provides Fault Tolerant communications path to the IPP II SDK controller.
- For proper operation of Fault Tolerant Communication, bi-directional device polling must be included in the third parties software development.



7.3 Star Configuration

- Sensor specifications are the same as those in the Non-Fault Tolerant Configuration but provides the most secure communications path to the GCM II-HD controller.