

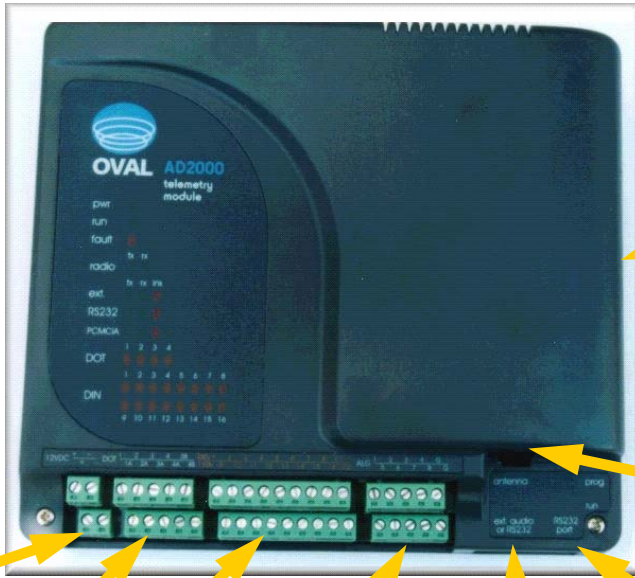


telemetry + control solutions

AD2000 Typical system configurations

**Rev. 1.03
April 2003**

Typical AD2000 Configurations



PCMCIA port supporting RS232 serial card, Ethernet card and PSTN modems

Internal Data radio modem antenna connection (SMA type)

12 or 24VDC supply

4 digital outputs—relay or transistor.

16 digital inputs 10-50 VDC/AC or 60-130VDC/AC (one high speed pulse counter)

8 analog inputs
Option available for 4 analog outputs to be fitted. Total analog count is always 8 so with analog output option available combinations (which are jumper selectable) are:
4 analog input/4 analog output
5 analog input/3 analog output
6 analog input/2 analog output
7 analog input/1 analog output

External Audio port for connection to external radios via internally installed FFSK modem (1200/2400/4800 baud)

OR

RS232 connection to external radio modems or other serial devices such as GSM/CDMA/PSTN modems and PLCs/DCSs/HMI etc.

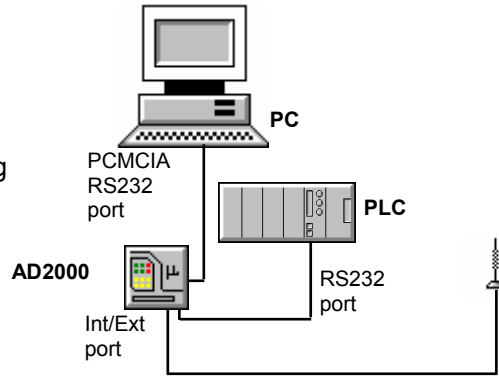
Please note that if the internal radio is fitted this port cannot be used for any other purpose.

RS232 connection to external radio modems or other serial devices such as GSM/CDMA/PSTN modems and PLCs/DCSs/HMI etc.



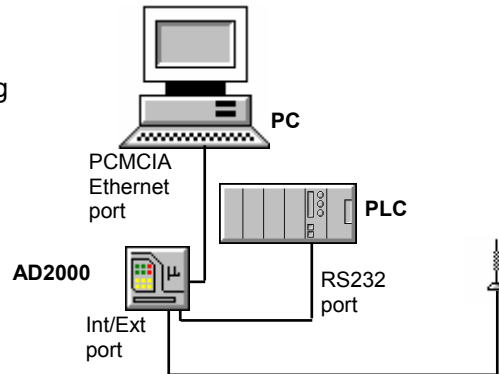
Typical configuration 1

- ✓ Internal radio installed inside AD2000 casing using internal FFSK 2400/4800 baud modem.
- ✓ RS232 port to 38.4k baud to external PLC. Several popular protocols supported.
- ✓ PCMCIA RS232 port to 38.4k baud to programming PC or HMI.



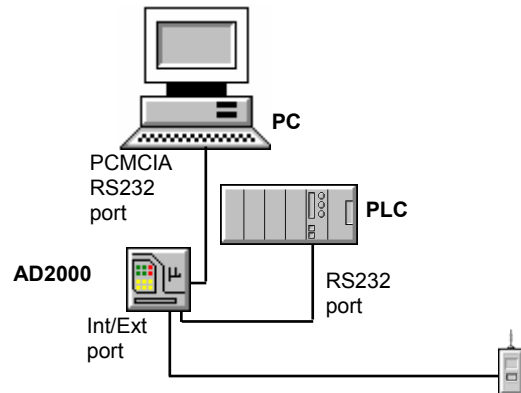
Typical configuration 2

- ✓ Internal radio installed inside AD2000 casing using internal FFSK 2400/4800 baud modem.
- ✓ RS232 port to 38.4k baud to external PLC. Several popular protocols supported.
- ✓ PCMCIA port to Ethernet TCP/UDP to programming PC and HMI – two simultaneous sockets supported.



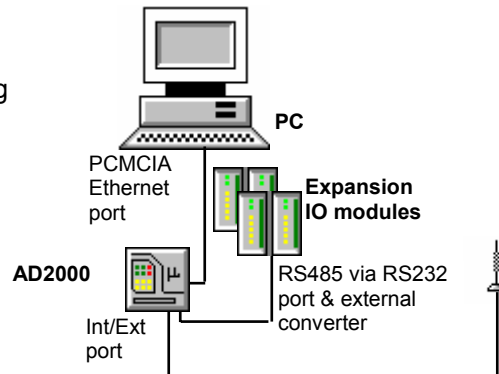
Typical configuration 3

- ✓ External radio using internal AD2000 FFSK 2400/4800 baud modem.
- ✓ RS232 port to 38.4k baud to external PLC. Several popular protocols supported.
- ✓ PCMCIA RS232 port to 38.4k baud to programming PC or HMI.



Typical configuration 4

- ✓ Internal radio installed inside AD2000 casing using internal FFSK 2400/4800 baud modem.
- ✓ Expansion IO modules via RS232/RS485 converter – up to 32 x 16 point digital input or output modules.
- ✓ PCMCIA port to Ethernet TCP/UDP to programming PC and HMI – two simultaneous sockets supported.

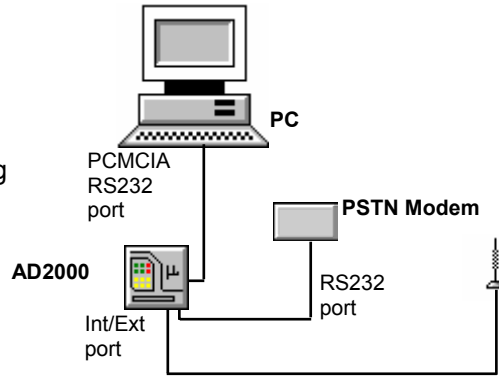


Please Note: Several other combinations of the above configurations are possible



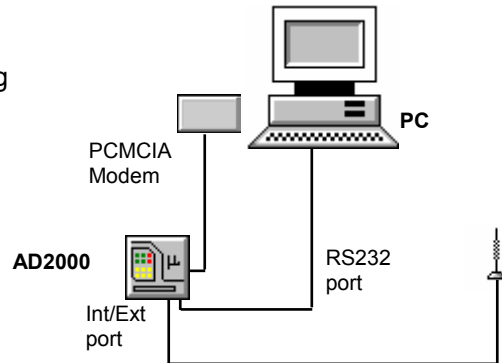
Typical configuration 5

- ✓ Internal radio installed inside AD2000 casing using internal FFSK 2400/4800 baud modem.
- ✓ RS232 port to 38.4k baud to external PSTN (dialup) modem.
- ✓ PCMCIA RS232 port to 38.4k baud to programming PC or HMI.



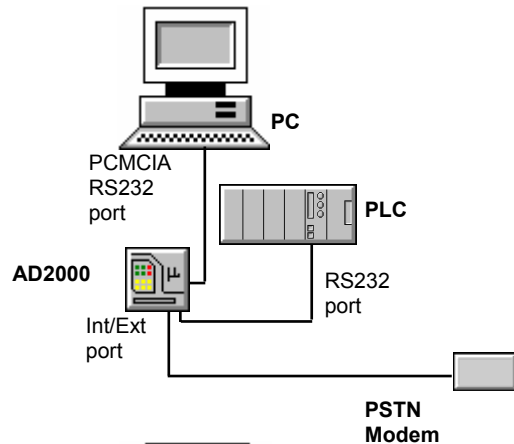
Typical configuration 6

- ✓ Internal radio installed inside AD2000 casing using internal FFSK 2400/4800 baud modem.
- ✓ RS232 port to 38.4k baud to external PLC. Several popular protocols supported.
- ✓ PCMCIA PSTN (dialup) modem.



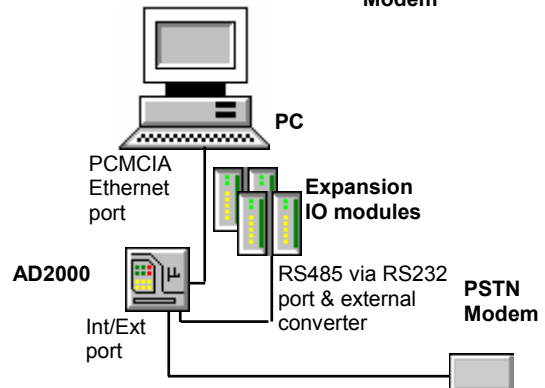
Typical configuration 7

- ✓ External PSTN Modem.
- ✓ RS232 port to 38.4k baud to external PLC. Several popular protocols supported.
- ✓ PCMCIA RS232 port to 38.4k baud to programming PC or HMI.



Typical configuration 8

- ✓ External PSTN Modem.
- ✓ Expansion IO modules via RS232/RS485 converter – up to 32 x 16 point digital input or output modules.
- ✓ PCMCIA port to Ethernet TCP/UDP to programming PC and HMI – two simultaneous sockets supported.

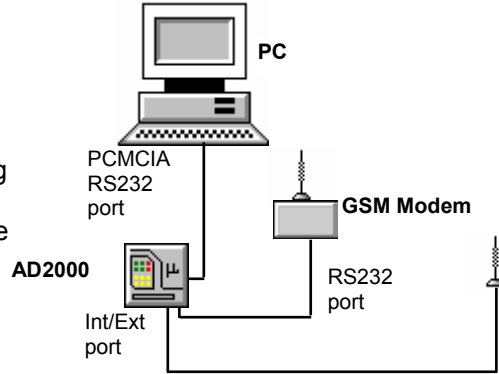


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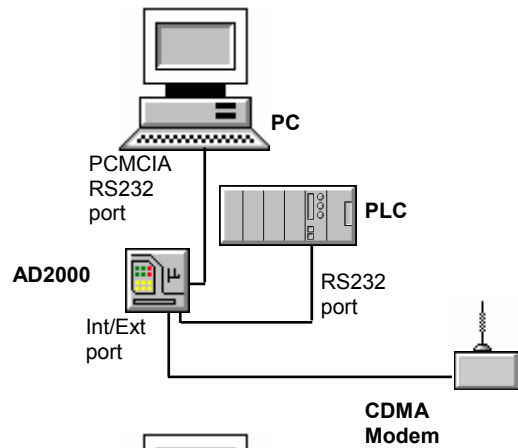
Typical configuration 9

- ✓ Internal radio installed inside AD2000 casing using internal FFSK 2400/4800 baud modem.
- ✓ RS232 port to 38.4k baud to external GSM (mobile phone) modem.
- ✓ PCMCIA RS232 port to 38.4k baud to programming PC or HMI.



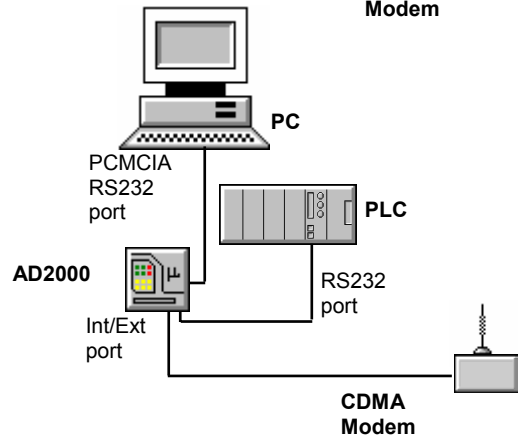
Typical configuration 10

- ✓ External CDMA (mobile phone) modem.
- ✓ RS232 port to 38.4k baud to external PLC. Several popular protocols supported.
- ✓ PCMCIA RS232 port to 38.4k baud to programming PC or HMI.

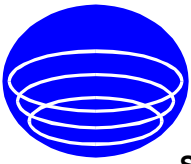


Typical configuration 11

- ✓ External CDMA (mobile phone) modem.
- ✓ RS232 port to 38.4k baud to external PLC. Several popular protocols supported.
- ✓ PCMCIA RS232 port to 38.4k baud to programming PC or HMI.

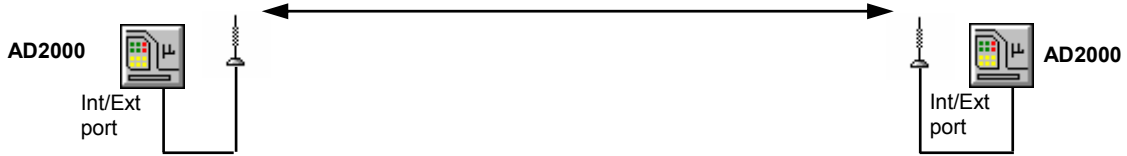


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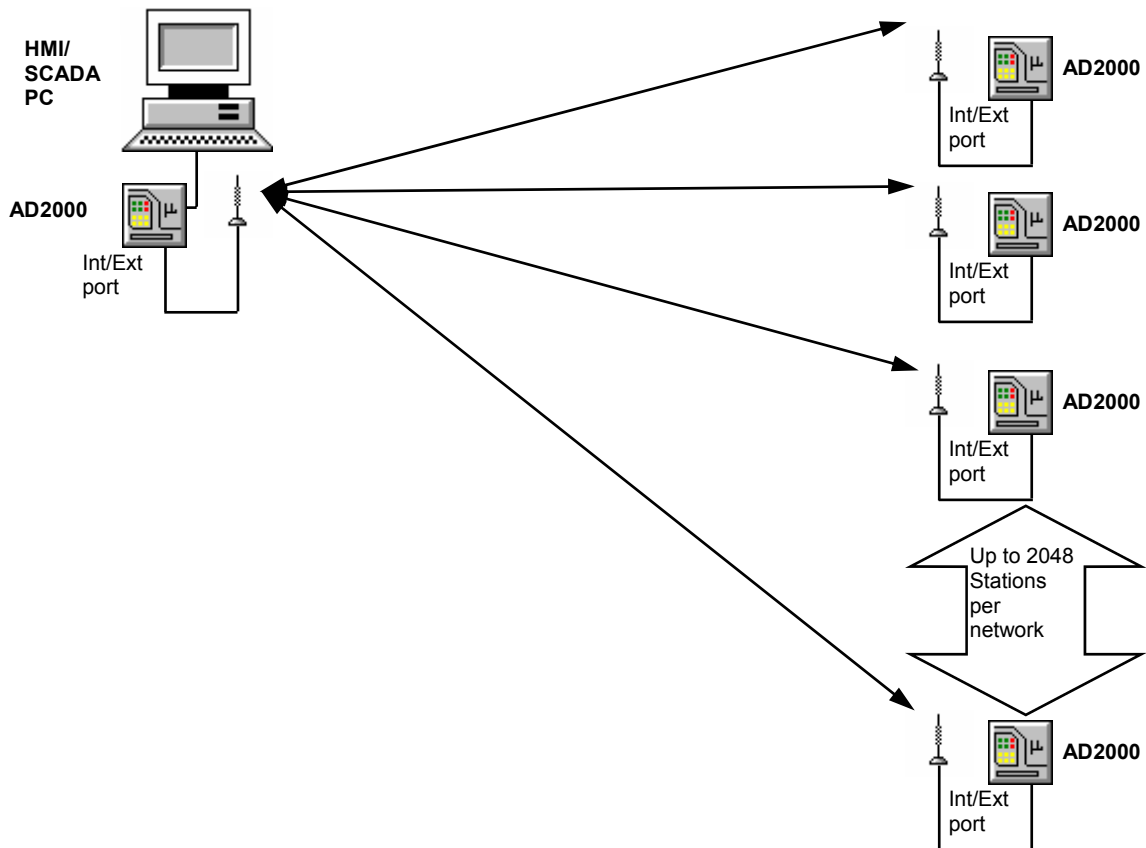
System configuration 1

- ✓ Point to Point (PTP). Using internal radio.



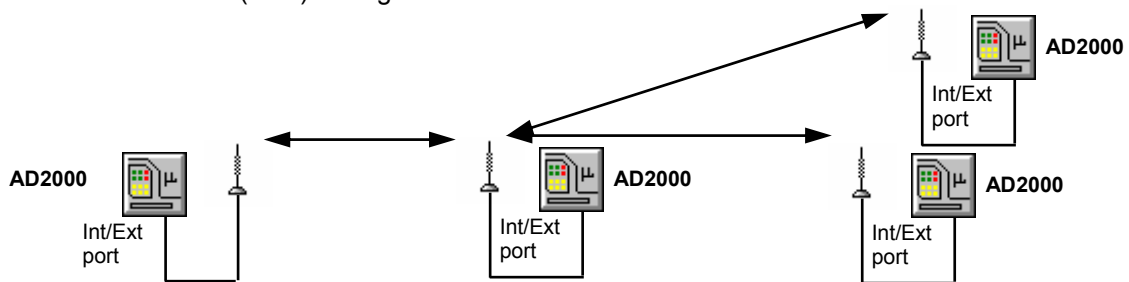
System configuration 2

- ✓ Point to Multi-Point (PTMP). Using internal radio.

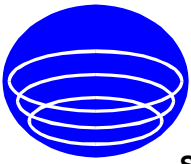


System configuration 3

- ✓ Store & Forward (S&F). Using internal radio.

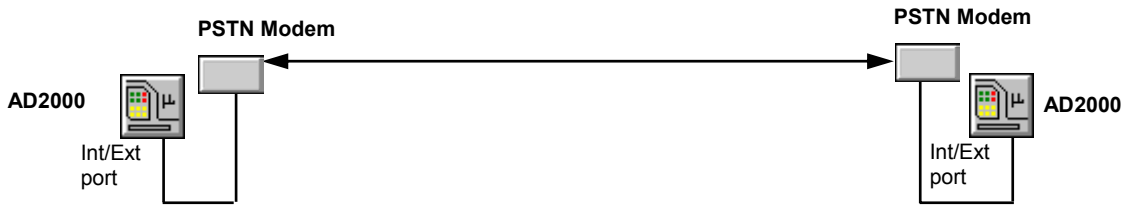


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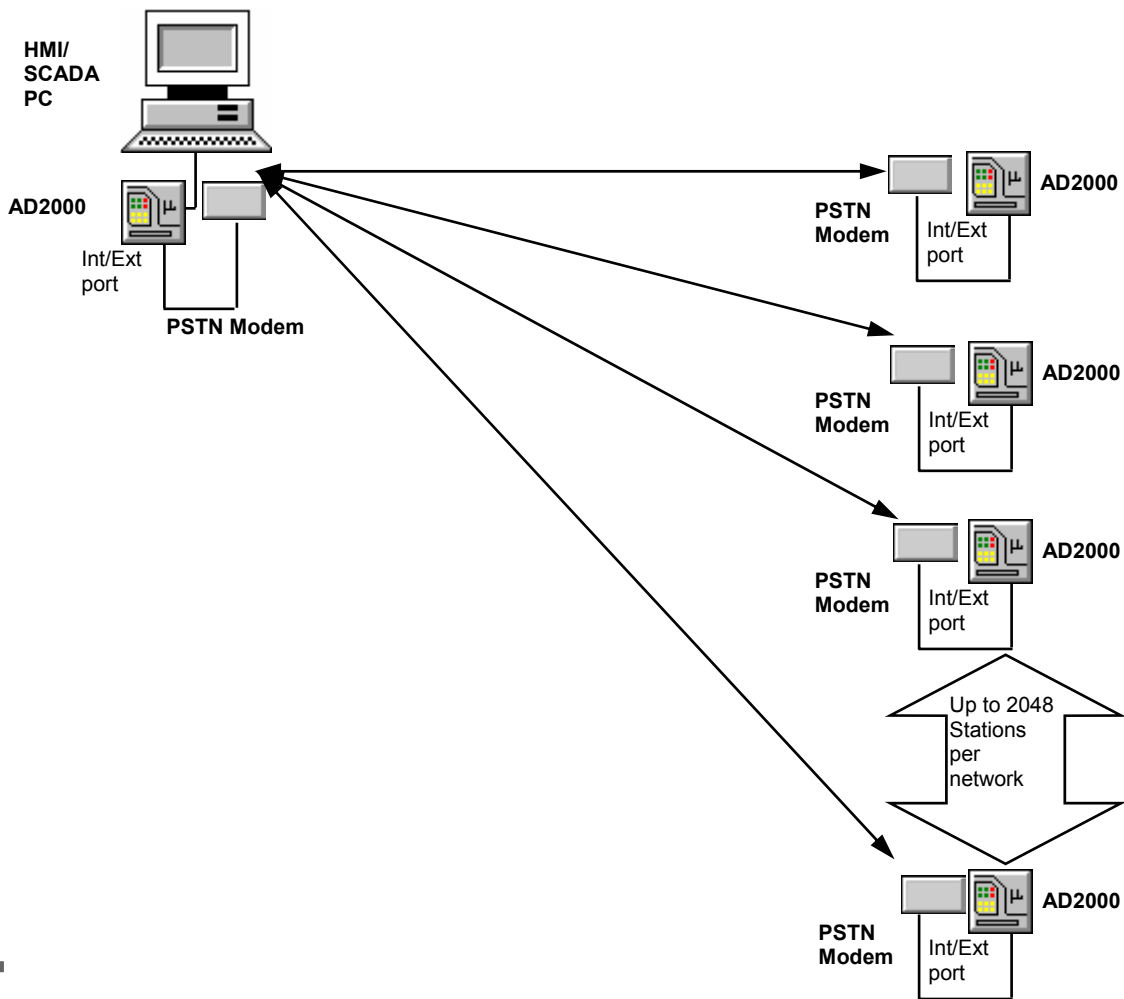
System configuration 4

- ✓ Point to Point (PTP) using PSTN Modems.

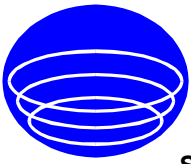


System configuration 5

- ✓ Point to Multi-Point (PTMP) using PSTN Modems.

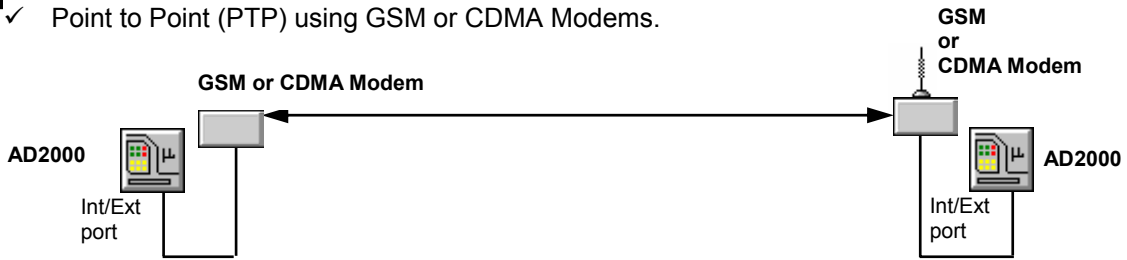


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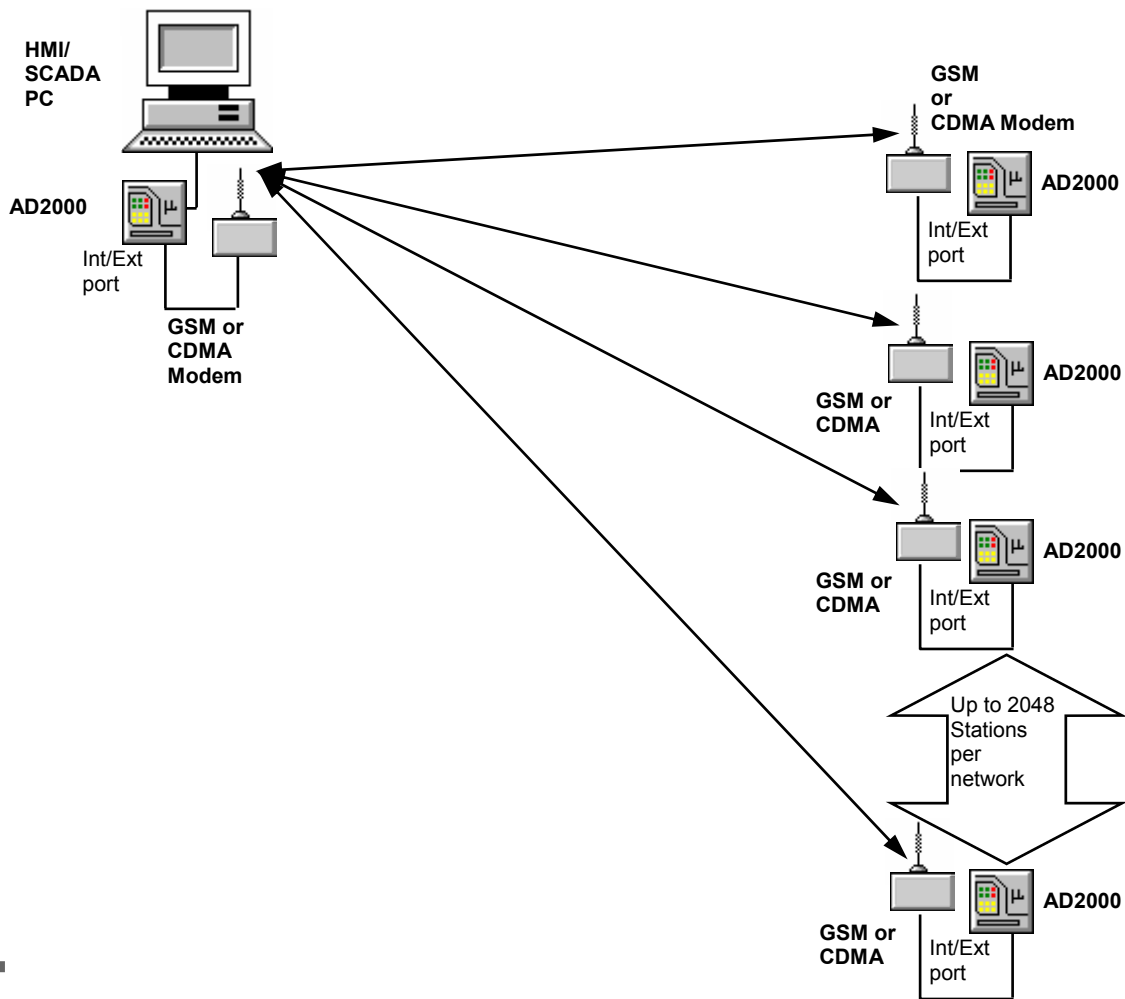
System configuration 6

- ✓ Point to Point (PTP) using GSM or CDMA Modems.



System configuration 7

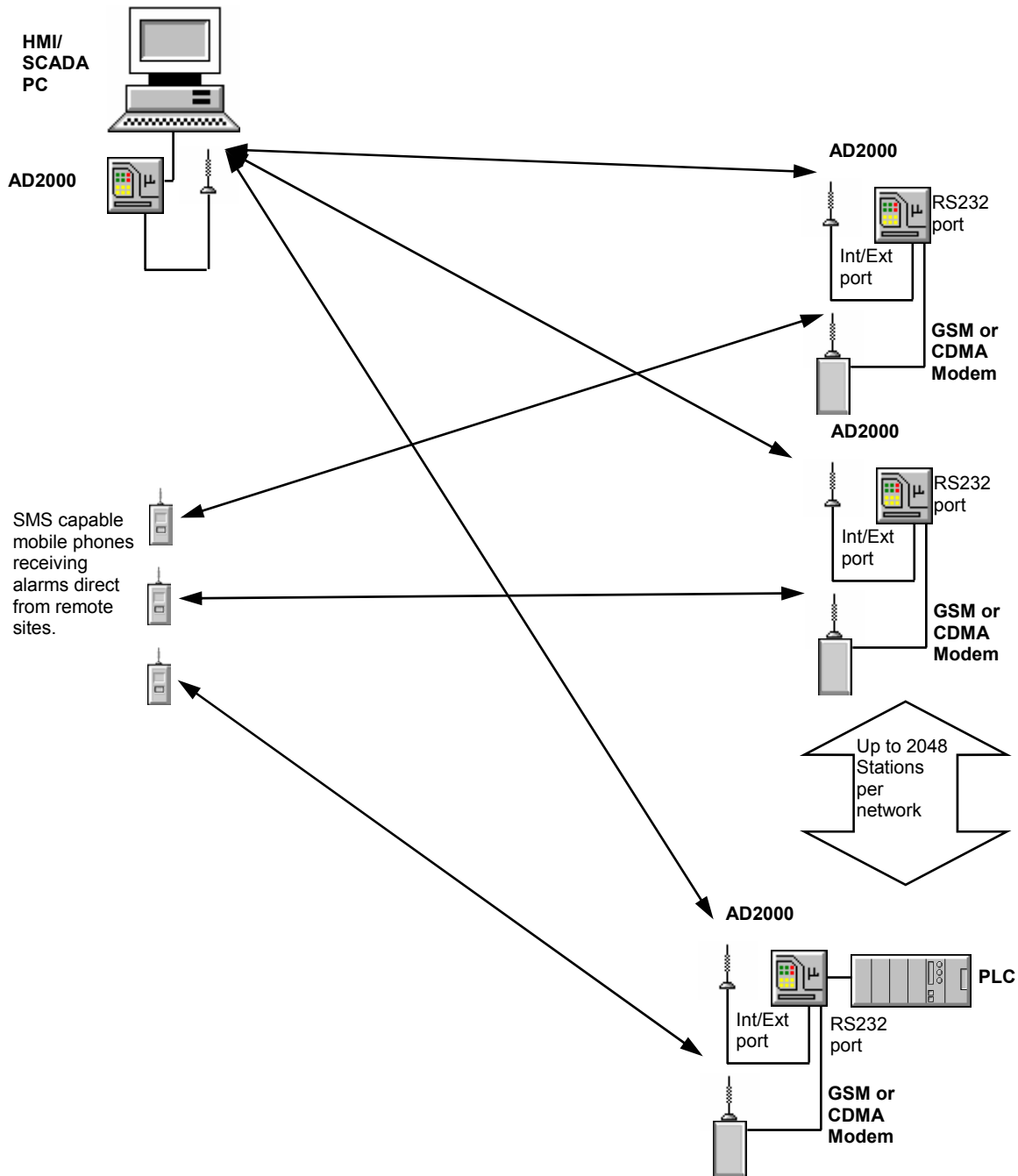
- ✓ Point to Multi-Point (PTMP) using GSM or CDMA Modems.



Please Note: Several other combinations of the above configurations are possible

System configuration 8

- ✓ Point to Multi-Point (PTMP) with GSM or CDMA SMS messaging.
- ✓ Internal radio installed inside AD2000 casing using internal FFSK 2400/4800 baud modem.
- ✓ External GSM or CDMA (mobile phone) modem for SMS alarm reporting from remote station to nominated service/maintenance personnel and for redundant communications path.



Please Note: Several other combinations of the above configurations are possible



Typical General Arrangement of AD2000 on a free-standing mast

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