



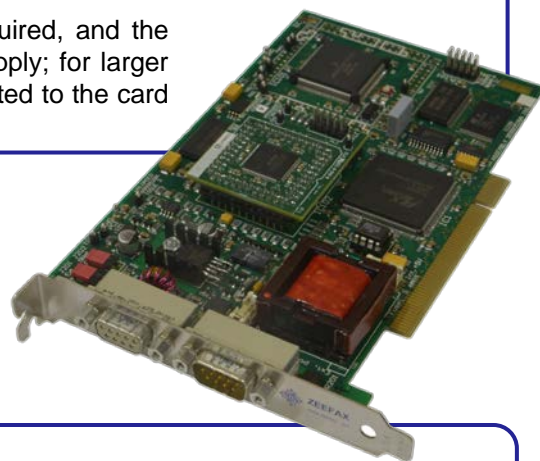
### Introduction

A range of options are available for IMP users to interface the SNet to the host or controlling computer. Each interface can power a small IMP system directly, or up to 50 INMPs when used with an external power supply. For non-USB computers, the 35954C PCI plug-in card has been and remains the most popular interface option.

Following our acquisition of the rights to the IMP system, Zeefax have re-engineered and re-manufactured the 35954C, and new cards are now available to users who wish to continue using their existing processor platforms, but who now require new system components or spare parts.

The 35954C occupies a single PCI bus slot and contains its own coprocessor and 8kByte dual port memory to handle the network management, error checking and data buffering. Data is exchanged with the PC via a selectable 512-byte memory-mapped window, or using a port addressing mode.

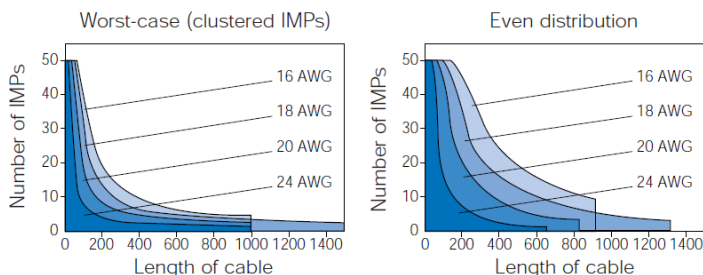
Several 35954C cards may be present in a single PC if required, and the interface can power up to 5 IMPs via the PC's own power supply; for larger systems, an external power supply is required which is connected to the card using the integral 9-pin DIN type connector.



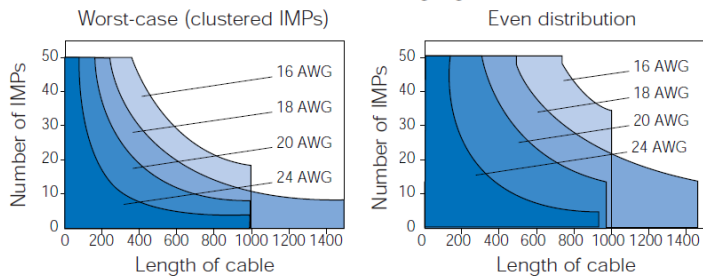
### SNet Cable

SNet cabling is available from several leading manufacturers or from Zeefax, in a range of sizes. The choice depends on the type of power supply, the number of INMPs to be used, their distribution along the SNet and the distance to be covered. Generally, it is better to use a higher voltage supply and higher (thinner) gauge cable, as shown in the diagrams opposite.

Recommended wire gauge for 24V



Recommended wire gauge for 50V



#### Cable suppliers reference

Cable gauge	Anixter	Brand Rex	Alpha Cable	Belden
16	501311	T12460	9820	9860
18	501569*	CD8920251*	-	9250
20	501310	BC57207	9818	9207 9815 (direct burial)
24	501312	BI56641	2400	8641

\*These cables are fire retardant to NEC CL2 and can be used, with a 48V dc. power supply, for networks up to 1.5km

## 35954C Specifications

### SNet capacity

Max length of cable	1,500 m (1 mile)
Max number of IMPs	
With external psu	50
powered from PC	5

### PC operating requirements

Address space	512 bytes, base address selectable
Address Selection	80000H to FFE00H in steps of 512 bytes
IRQ interrupts	Selectable from IRQ2,3,5-7,10-14 or disabled
Power	
5v supply	600mW max.
12v supply	50mW max. plus 1.2w max. for each IMP powered from the supply

### External power supply (if used)

Voltage	12 to 50 Vdc, (depending on length and gauge of SNet cable used and number of IMPs)
Output ripple	<100mV rms
Current	1.2W per IMP

### Environment

Temperature	
Operating	0° to 55°C (32° to 131°F) @ 50%RH 0° to 45°C (32° to 113°F) @ 95%RH
Storage	-40° to 70°C (-40° to 158°F) @ 95%RH
Humidity	
Operating	8 to 95% RH
Storage	0 to 95% RH

### Physical

Half PCI I/O Card	
Length	179mm / 7.05 in.
Height	130mm / 5.12 in.
Width	25mm / 1.0 in.
Weight	0.2kg / 0.44 lbs.

Since 1980, **Zeefax** has built a reputation on its ability to provide reliable and excellent engineering services to the Power and Process sectors worldwide, and today has the technical expertise and capability to specify, engineer, manufacture and deliver a wide range of turbine supervisory and condition monitoring products and systems.

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