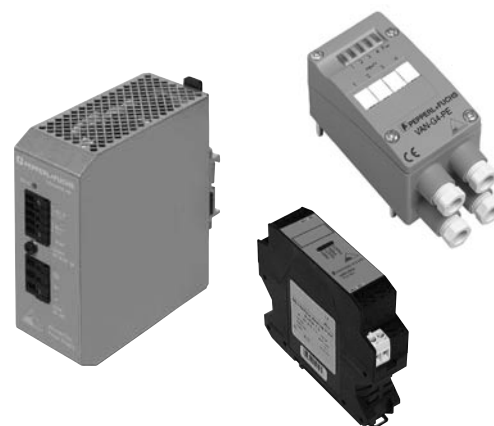


Power Conditioners

- Output current up to 4 A per segment
- DC input voltage
- Diagnostic LED indication
- Protection degree IP20 or IP67



DC Input Overview

The AS-Interface power supply unit VAN-24DC-K6 can supply 31.5 V at 3 A to a fully loaded AS-Interface system. The input voltage from 18-32 VDC is stepped up to power AS-Interface. This model is perfect for mobile equipment or other applications where no AC power is present.

The VAN-G4-PE is a power conditioner for either flat or round cable. Often, multiple power extenders are used with a single 30 VDC power supply. Also available is an enclosure mount power extender, VAN-KE2-2PE, for two AS-i segments. This is often used on a dual network gateway or before and after a repeater.

Because any 30 VDC supply can be used with the power conditioner, it is possible to utilize redundant power supplies. Often, redundant power supplies are required for process applications. The power conditioner, however, can never be redundant. A maximum of one power conditioner can be used in each AS-Interface segment.

Since power conditioners are field mountable IP67 devices, it is now possible to feed an AS-Interface segment from a standard 30 VDC power supply located in an enclosure far away from the AS-Interface system without taking up segment length. The length of cable that feeds the power conditioner does not count towards the 100 m AS-Interface segment limit.

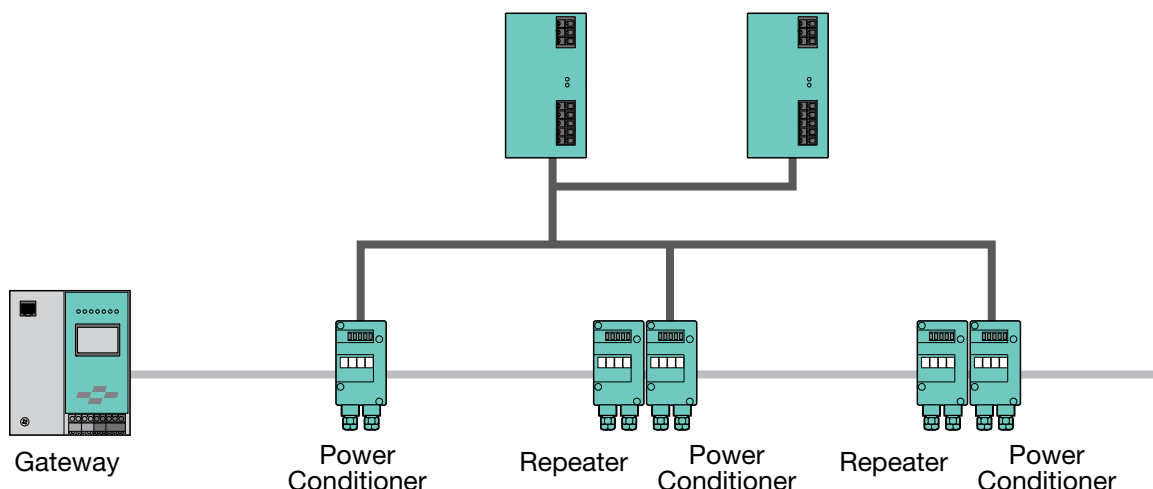
Regardless of the cable length and the use of repeaters, a maximum of 62 modules per gateway can be placed on an AS-Interface network.

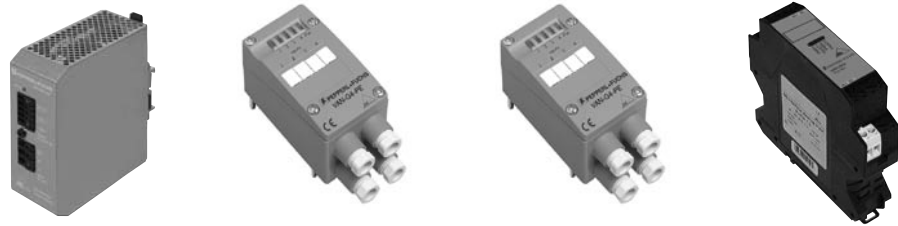
Power extender voltage will depend on network length. The following typical limits should be observed:

- ≈ 30 V 100 m AS-i cable
- ≈ 28 V 80 m AS-i cable
- ≈ 26 V 60 m AS-i cable

See pages 65-66 for DC input power supply wiring and dimensions.

30 V Standard or Redundant Power Supplies



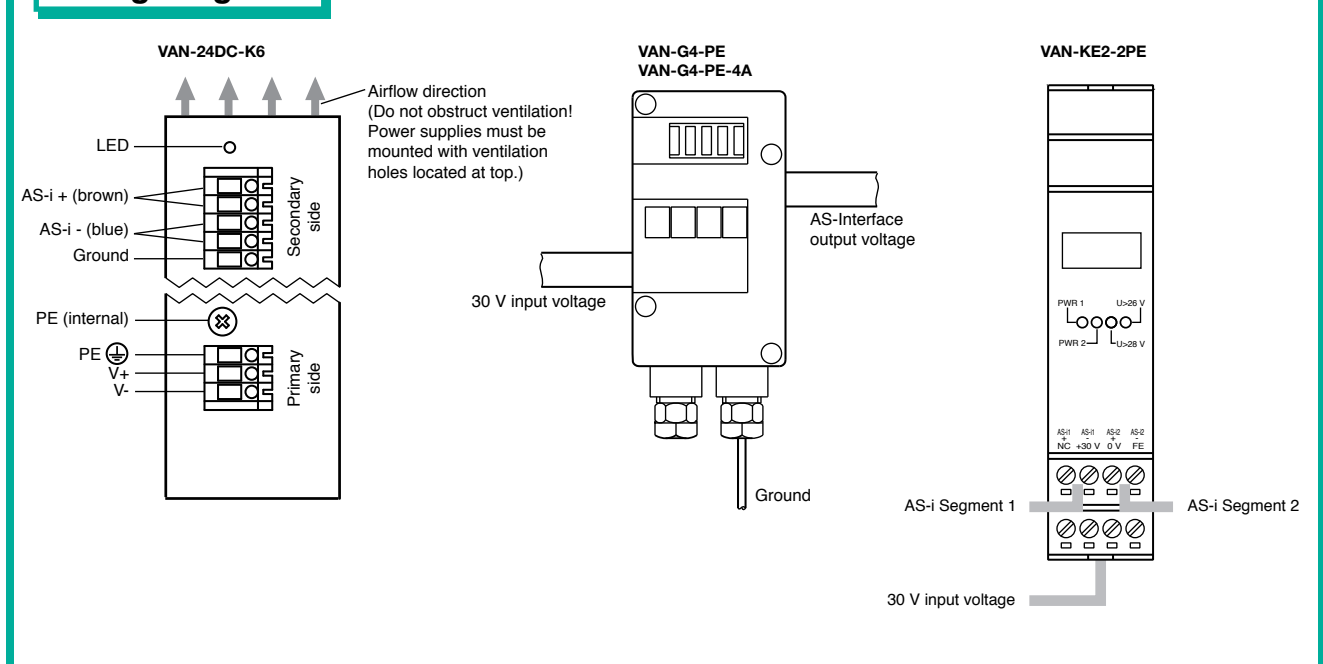


Power Supplies Power Conditioners

| Specifications | | | | | |
|--------------------------------------|----------------------------|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|
| TYPE | 3 A Power Supply | 2.8 A Power Conditioner | 4 A Power Conditioner | Dual 4 A Power Conditioner | |
| MODEL NUMBER(S) | VAN-24DC-K6 ⚡ | VAN-G4-PE ⚡ | VAN-G4-PE-4A | VAN-KE2-2PE ⚡ | |
| OUTPUT SUPPLY | | | | | |
| CURRENT NOMINAL | 3 A | 2.8 A | 4 A | 4 A x 2 networks | |
| CURRENT LIMIT | ≈ 3.6 A | ≈ 3 A | ≈ 6 A | ≈ 6 A x 2 networks | |
| VOLTAGE | 29.5-31.6 VDC AS-Interface | 29.5-31.6 VDC AS-Interface | 29.5-31.6 VDC AS-Interface | 29.5-31.6 VDC AS-Interface | |
| SHORT CIRCUIT/ OVERLOAD PROTECTED | Yes | - | - | - | |
| INPUT SUPPLY | | | | | |
| RATED OPERATING CURRENT | 6 A @ 24 VDC | 2.8 A @ 30 VDC | 4 A @ 30 VDC | 8 A @ 30 VDC | |
| FREQUENCY | - | - | - | - | |
| OPERATING VOLTAGE | 24 V ± 1 % | 30 VDC | 30 VDC | 30 VDC | |
| VOLTAGE RANGE | 18-32 VDC | - | - | - | |
| EFFICIENCY | ≈ 88% | - | - | - | |
| POWER SUPPLY OVERLOAD RESET | Automatic | - | - | - | |
| GROUND FAULT DETECTION | No | No | No | No | |
| PROTECTION (IEC) | IP20 | IP65 | IP65 | IP20 | |
| TEMPERATURE RANGE | WORKING | +14 °F to +158 °F (-10 °C to +70 °C) | +32 °F to +158 °F (0 °C to +70 °C) | +32 °F to +158 °F (0 °C to +70 °C) | +32 °F to +131 °F (0 °C to +55 °C) |
| | STORAGE | -4 °F to +176 °F (-20 °C to +80 °C) | -13 °F to +185 °F (-25 °C to +85 °C) | -13 °F to +185 °F (-25 °C to +85 °C) | -13 °F to +185 °F (-25 °C to +85 °C) |
| HOUSING MATERIAL | Steel, aluminum | PA6-GF30 | PA6-GF30 | PA 66-FR | |
| WEIGHT | 550 g (20 oz) | 120 g (6 oz) | 120 g (6 oz) | 120 g (6 oz) | |
| APPROVALS | CE, UL US, AS | CE, UL US, AS | CE, AS | CE, AS | |
| MOUNTING | DIN rail | DIN rail, mounting holes | DIN rail, mounting holes | DIN rail | |
| AS-INTERFACE CONNECTION | terminals | Flat or round cable | Flat or round cable | Removable terminals | |

⚡ Stocked item
Consult factory for all other models

Wiring Diagrams



Subject to modifications without notice

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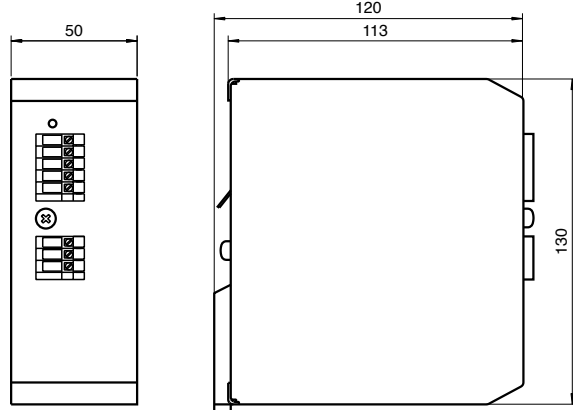
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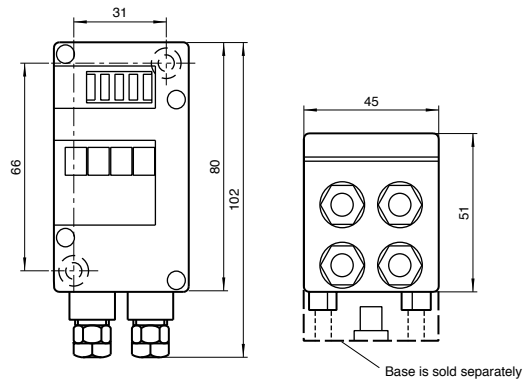
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SENSING YOUR NEEDS

Dimensions (mm)

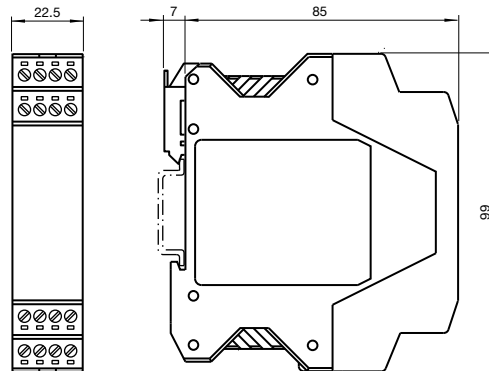
VAN-24DC-K6



VAN-G4-PE
VAN-G4-PE-4A



VAN-KE2-2PE



Accessories

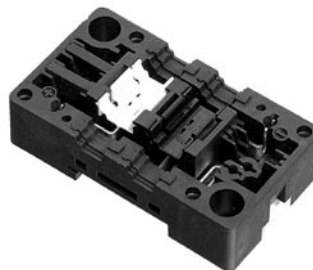
U-G1PP

Round cable base with external power terminals



U-G1FF

Flat cable mounting base for black and yellow cables



PG11-1/2NPT

PG11 male to 1/2" NPT female conduit adapter



See pages 201-216 for complete AS-Interface accessory listing.