

THE CLAIM

A cable claims *cable* and names what it mates.

EIS draft, cable (PWR-BUS)

EIS draft, cable (VID-75)

EIS draft, cable (PWR-DC12)

EIS draft, cable (PWR-A6)

WHAT IT PUBLISHES

FIGURE	ID
<i>The one interface it mates: PWR-BUS for a power ribbon, VID-75 for a coaxial cable, PWR-DC12, or PWR-A6</i>	4.2

☐ Keep the claim line and these figures in one claim file, `eis-claim.yaml`; *eis claim* checks it.

READ

6.4 the bus, 6.5 ribbons and links, 6.7 PWR-DC12, 6.8 PWR-A6, 7.4 VID-75, 9.3 assembly.

READING THIS SHEET

■ shall □ recommended ○ may

IDs omit the EIS- prefix. Italic lines are informative notes. This reference is informative: the clauses and the register govern.

POWER RIBBON

- IDC ribbon sockets that mate a 2 × 5 or 2 × 8 header on a 2.54 mm grid. BUS-002
- Pin for pin to the 6.4 pinout at both ends. BUS-003
- From a bus header to a module: ≤ 400 mm, conductors ≥ 28 AWG. BUS-015
- A link between two bus boards joins CV to CV and gate to gate. BUS-014

A longer or thinner ribbon drops the module's rails at the 2 A header limit. Marking and keying are on the ribbon card.

VIDEO · VID-75

- 75 Ω coax with RCA, BNC, or SMA plugs; center to center, shell to shell at both ends. V75-007

The plug type may change end to end. The shell joins the 0 V of the two products.

ANALOG · PWR-A6

- A6-VH3: JST VH, 3 circuits on 3.96 mm; pin 1 +6 V, 2 0 V, 3 -6 V; marked ±6 V. A6-001 A6-007
- Pin to the same pin at both ends; ≤ 500 mm; conductors ≥ 22 AWG. A6-006

ANALOG · PWR-A15

- A15-MF4: Mini-Fit Jr, 2 × 2 on 4.20 mm; pins 1, 2 0 V, 3 -15 V, 4 +15 V; marked ±15 V. A15-001 A15-007
- Pin to the same pin at both ends; ≤ 500 mm; conductors ≥ 20 AWG. A15-006

DC · PWR-DC12

- A straight barrel cable: tip to tip, sleeve to sleeve. DC-007
- A multi-pin cable: each pin to the same pin and function at both ends. DC-008

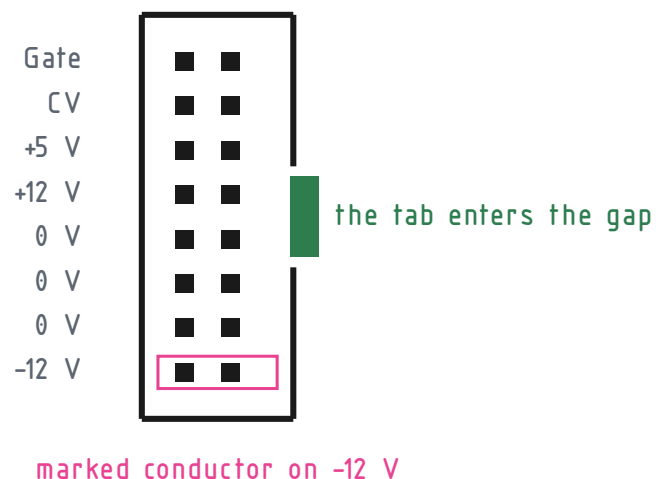
VARIANT PART	FORM	REFERENCE	A	PINS
DC-BAR21	2.1 × 5.5 barrel	2.5	center +	typ.
DC-BAR25	2.5 × 5.5 barrel	5	center +	typ.
DC-VH2	JST B2P-VH or B2PS-VH	10	1 +V · 2 -V	
DC-DIN4	Kycon KPJX-4S-S	15	1 ₄ +V · 2,3 -V · 5 shell, opt.	
DC-MF6	Molex 39-30-1060	24	1,2,3 +V · 4,5,6 -V	
DC-MF8	Molex 39-30-1080	28	1,2,3 ₄ +V · 5,6,7,8 -V	

INSTALLER · 9.3

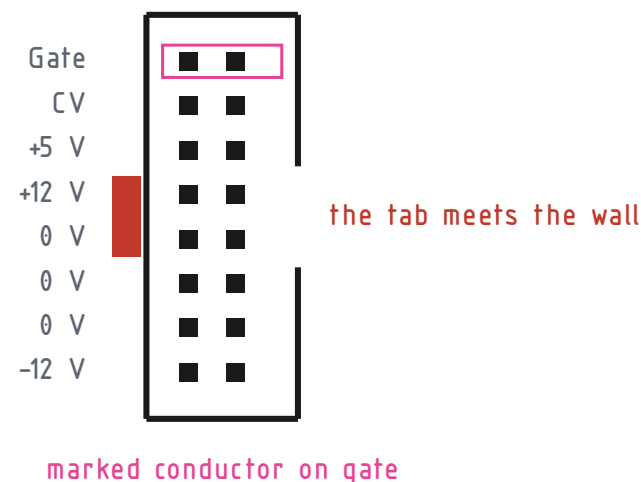
- Never connect bus power and DC entry power to one dual-source module at the same time. ASM-003
- Feed each DC rail from one adapter or one case DC entry at a time. ASM-005
- Mate a multi-pin DC entry only with its own variant's plug. ASM-006

EIS · The marked conductor and the shroud key

Socket the right way round



Socket reversed

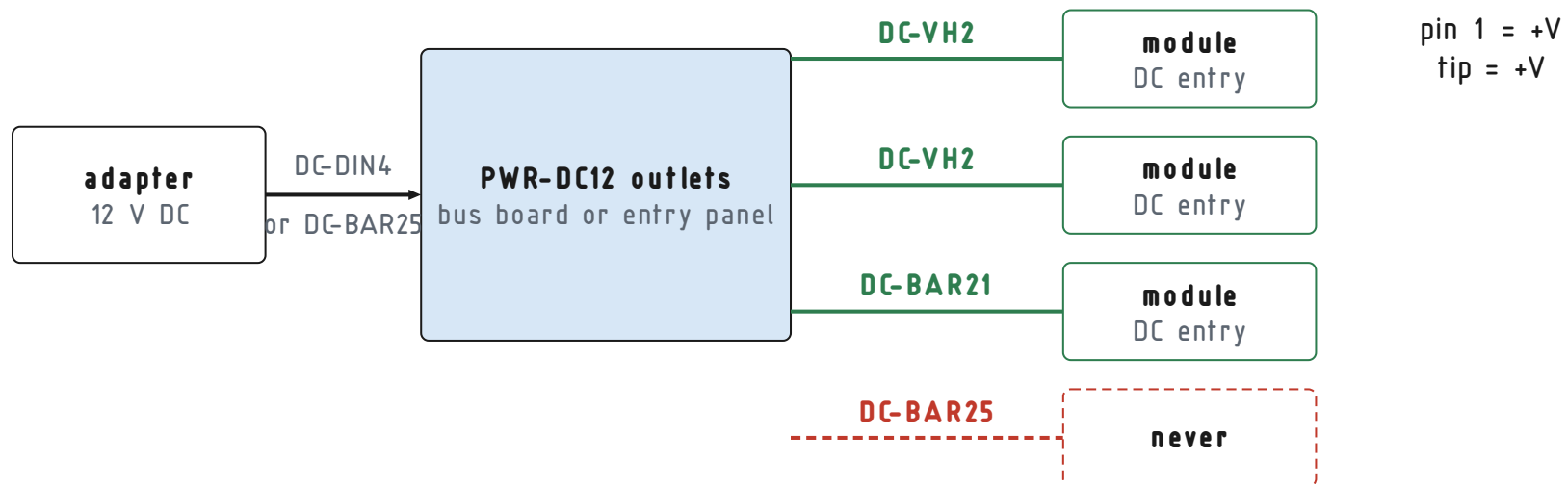


Seen from the mating side with the -12 V end at the bottom, the shroud's key gap is on the right (BUS-005). On a module, a bus board, and a ribbon, the marked conductor is -12 V and points to the -12 V end of the header (BUS-004).

A cable that comes with a module is keyed, so it enters a shrouded header only the right way round (BUS-010). An unshrouded header cannot stop a reversed socket, so every module also survives one (BUS-009).

The marked conductor and the shroud key: a socket that fits and a reversed one (6.4).

EIS · PWR-DC12 distribution: from the adapter to the modules

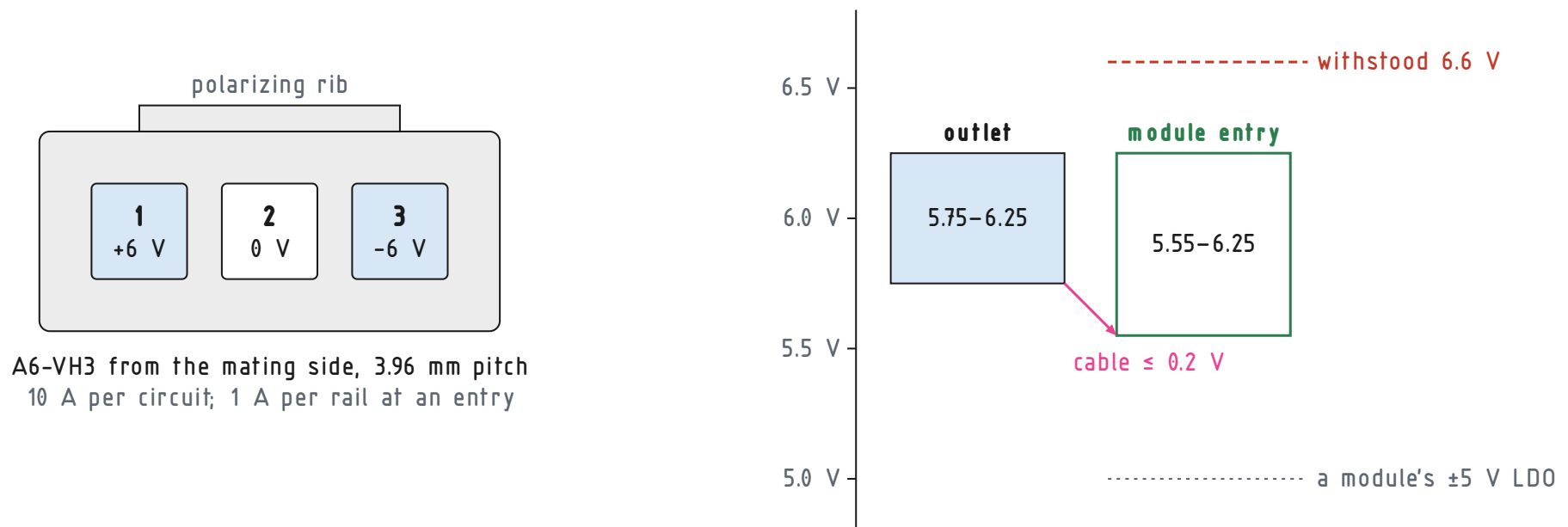


A product with PWR-DC12 outlets feeds modules only through DG-BAR21 jacks or DG-VH2 headers, never DG-BAR25 (DG-009); its cables keep +V to +V (DG-010).

DG-BAR25 takes power from an adapter. A DG-BAR25 plug fits a DG-BAR21 entry loosely and is never inserted (ASM-004).

From the adapter to the modules: DG-BAR21 or DG-VH2 outputs, never DG-BAR25 (6.7).

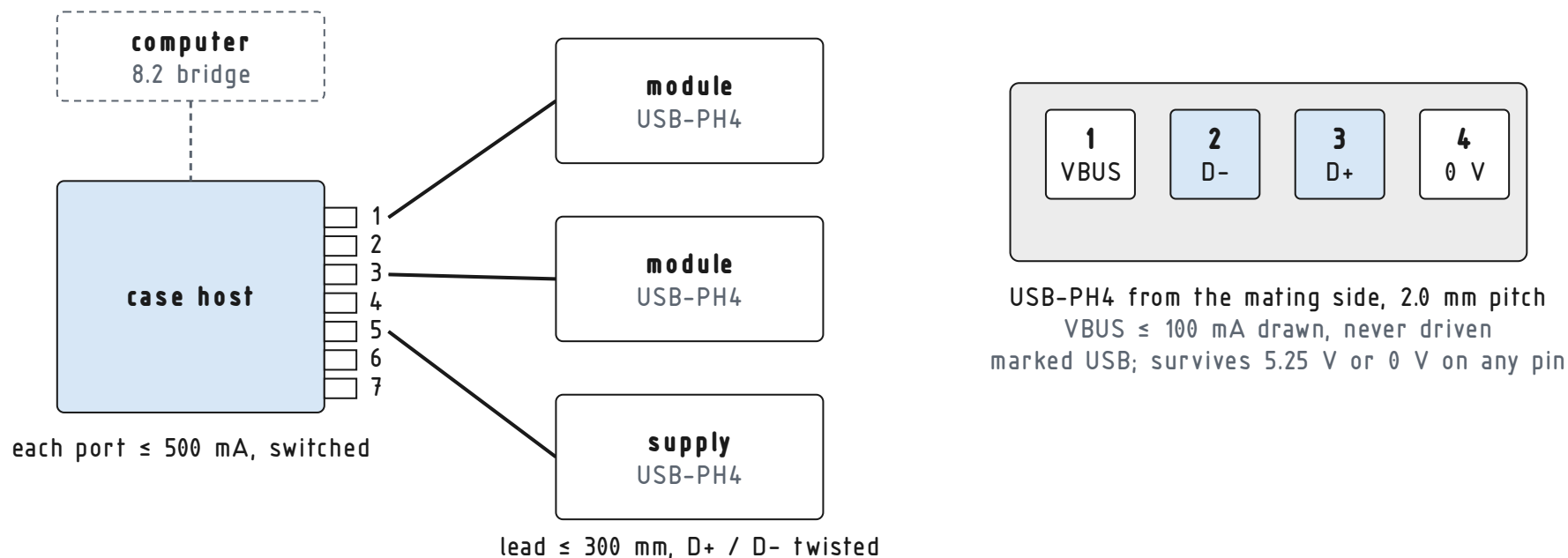
EIS · PWR-A6: the A6-VH3 entry and the voltage window



One connector for PWR-A6 only (A6-001). An outlet holds its window to its rating (A6-002); a module works across the entry window (A6-003), survives 6.6 V (A6-004), and draws at most 1 A per rail (A6-005).

PWR-A6: the A6-VH3 entry, its pins, and the voltage window from the outlet to the module (6.8).

EIS · CTRL-USB: a case host, its ports, and the USB-PH4 port behind each product



A USB 2.0 full-speed device on USB-PH4 (USB-001), marked and robust (USB-002), drawing ≤ 100 mA from VBUS (USB-003); a straight lead (USB-004).

The host limits and switches each port (USB-013) and numbers it (USB-014).

A case host, its ports, and the CTRL-USB ports of the modules behind the panels (8.1).