

PoE QUICK REFERENCE FOR INTEGRATORS

Power, channel and product-selection checks for AV networks

Use this card to confirm PoE power level, channel suitability and practical on-site checks before specification or installation.

1. POE STANDARDS AT A GLANCE

IEEE standard	Common name	Type	Max PSE power	Power available at PD
802.3af	PoE	Type 1	15.4 W	up to 12.95 W
802.3at	PoE+	Type 2	30 W	up to 25.5 W
802.3bt	PoE++ / 4PPoE	Type 3	60 W	up to 51 W
802.3bt	PoE++ / 4PPoE	Type 4	90 W	up to 71.3 W

PSE = power sourcing equipment, such as a switch or injector. PD = powered device.
The power leaving the switch is not the same as the power available at the device.

2. ON-SITE DESIGN CHECKS

- ☐  **Device power draw** — Check maximum draw, typical draw and start-up behaviour.
- ☐  **Switch budget** — Confirm switches total PoE budget, per-port capability and spare capacity.
- ☐  **Channel length** — Keep within the 100 m channel limit, including patch cords.
- ☐  **Cable construction** — Check conductor size, DC resistance and temperature rating.
- ☐  **Bundles & heat** — Check bundle size, airflow and ambient pathway temperature.
- ☐  **Components** — Confirm patch cords, keystone, RJ45s and field terminations suit the application.
- ☐  **Outdoor runs** — Check cable suitability, surge protection, earthing and bonding.
- ☐  **Monitoring & resilience** — Consider switch monitoring, UPS or redundancy where required.

3. CRITICAL RULES



Port count does not equal power budget.



100 m is the full channel limit, not just the fixed cable.



An injector adds power, not distance.



Category alone does not define PoE suitability.



High-power PoE and dense bundles need thermal margin.

4. KORDZ PRODUCT SELECTION GUIDE

Application	Suggested Kordz pathway
 Standard fixed infrastructure	ONE Cat6 / ONE Cat6A Network Systems
 High-density pathways or retrofit constraints	PRO Cat6 SlimCat / PRS Cat6A SlimCat Network Systems
 External routes	Outdoor or Direct Burial Network Solutions

Always confirm the specific product datasheet for PoE capability, channel length and installation limits.