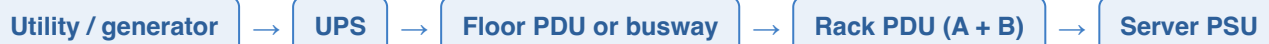


Rack PDU Reference

The four PDU tiers, the rack power chain, and what teams do with the data

The rack power chain



In dual-corded designs every rack has an A and a B PDU on independent upstream paths; each server's two PSUs plug into different sides so either path alone can carry the load.

Basic vs Metered vs Monitored vs Switched

Type	Measurement	Remote control	Best for
Basic	None	None	Stable, well-understood loads where cost matters most
Metered	Inlet (total) load, often on a local display	None	Keeping a whole rack safely under its breaker rating
Monitored	Network-reported, often per outlet	None	Capacity planning, energy reporting, and alerting
Switched	Network-reported, usually per outlet	On/off and reboot per outlet	Remote and lights-out sites, outlet-level access control

“Intelligent” or “smart” PDUs combine monitored + switched, often adding temperature and humidity sensor ports at the rack.

What teams use PDU data for

Capacity from measured load

Replace nameplate assumptions with actual per-outlet draw

A/B feed headroom

Keep each feed low enough that one side can carry everything

Phase balancing

Spread load evenly across three-phase legs

Remote power-cycle

Reboot a hung device from a switched outlet, no site visit

Finding idle equipment

Steady idle draw with no work points at decommission candidates

Energy & PUE reporting

Rack-level IT load from PDUs is the denominator of PUE

The PDU sits immediately upstream of the equipment — the one place in the chain where you can see what each device actually draws. Everything above it reports aggregates.