

NOMAD 4-1000-A

Single-arm re-deployable solar street-lighting tower · AS/NZS 1158 category V1–V5 road lighting · engineered sand ballasted base



The NOMAD 4-1000-A is a fully self-contained, re-deployable solar street light engineered for applications requiring AS/NZS 1158 category V1–V5 road-lighting compliance — road construction, mining and civil infrastructure projects. Delivering genuine street-lighting performance at an 11.5 m luminaire mounting height, it installs with no concrete footing, no trenching and no grid connection.

The 1 kW rotating solar array is turned to face north after placement, so the unit can be set down in any orientation as site layouts change. The engineered steel base is ballasted on site to its published ballast schedule. When the project stage moves, the ballast is returned to site and the unit redeploys to its next location or a new project.

1 kW rotating solar array

10 kWh LiFePO4

150 W+ road-optics LED

11.5 m mounting height

AS/NZS 1158 V1–V5

Satellite connectivity

Zero fuel · zero noise

Lighting: Single road-optics LED luminaire — 150W+ (drives up to 200 W, location dependent). LED drive power is matched to the certified lighting design for the required AS/NZS 1158 V-category — run as fixed output for compliance, or with automatic power scaling where the application permits.

FEATURES & BENEFITS

Moves with the project. Forklift pockets in the base; place, ballast and light a new work zone the same shift. Ideal for staged road construction, detours, laydown areas and haul roads.

No civil works. No concrete footings entering closure or reinstatement obligations — ballast is returned to site on redeployment, leaving nothing behind.

Real street lighting, off grid. Precision road-optics LED luminaire at 11.5 m — genuine roadway photometrics engineered for AS/NZS 1158 category V1–V5 designs.

Engineered power plan. Every unit is verified against the worst month of solar data for its deployment site — full-output dusk-to-dawn running, in writing.

KX1000 smart controller. Selectable operating mode — fixed LED output where the lighting standard requires constant illuminance, or automatic power scaling to protect the battery in extended overcast.

Satellite connectivity. Remote monitoring and control anywhere — no mobile coverage required. Fleet status, battery state and lighting schedules from the office.

Auxiliary power on site. Optional second 10 kWh battery powers cameras, sensors, telemetry and other site devices from the same tower.

Zero operating cost. No fuel, no refuelling visits, no noise, no emissions — and no cabling, metering or grid connection charges.

Built to last. Hot-dip galvanised steel, designed to AS/NZS 1170.2 with a published ballast schedule · 10-year structural warranty.

APPLICATIONS

Road construction

Work-zone and detour lighting to AS/NZS 1158 V-categories, staged carriageway switches, intersections, laydown and plant compounds — repositioned as the job progresses.

Mining & resources

Haul roads and internal mine roads — typically designed to AS/NZS 1158 V-categories in conjunction with site mine-safety lighting requirements — plus camps, car parks, walkways and ROM areas. No diesel logistics, no closure liability.

Civil & infrastructure

Ports, rail corridors, utilities, events and temporary public realm — commissioned in minutes, redeployed for years.

LIGHTING COMPLIANCE — AS/NZS 1158 V1–V5

Designed for applications requiring AS/NZS 1158 category V1–V5 vehicular road lighting. GFS supplies a certified lighting design for the required category, with the controller configured to suit — fixed LED output where the standard requires constant illuminance, or automatic power scaling where the application permits. Haul roads and internal mine roads are designed to the same V-categories in conjunction with site mine-safety lighting requirements. Mast height, outreach length and LED power are sized to each location's wind conditions and solar irradiance — every system is configured to your specific demands.

VERIFIED SOLAR PERFORMANCE

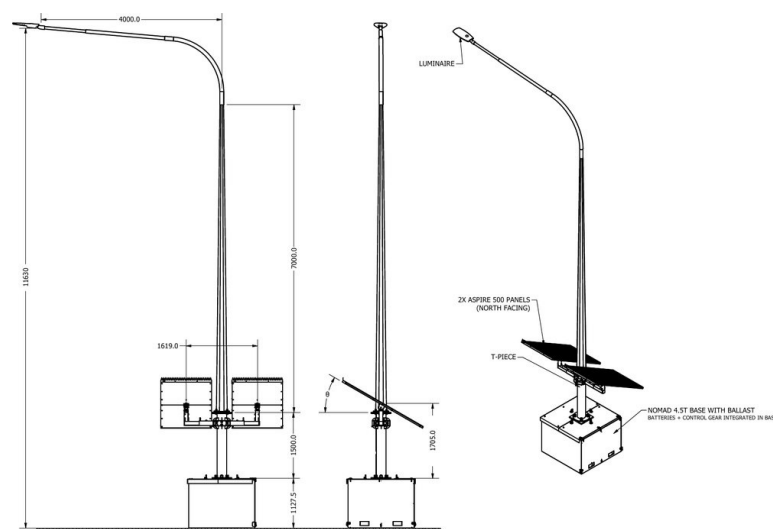
Every deployment is engineered from long-term solar climatology for the site's own coordinates and verified against the worst month of the year. At a representative southeast Queensland site, the NOMAD 4-1000-A runs its 150 W lighting load at full power, dusk to dawn, every night of the year on the standard 10 kWh battery, with 4.4 nights zero-sun reserve on the longest winter night (266 W sustainable vs a 150 W load). A site-specific performance report is supplied with every proposal.

CONNECTIVITY & AUXILIARY POWER

Satellite connectivity — remote monitoring, control and scheduling with no dependence on mobile networks; suited to remote mining and early-works road projects.

Optional additional energy storage — a second 10 kWh battery pack (2 × 10 kWh total) supports auxiliary site devices such as CCTV cameras, environmental sensors, communications and telemetry, powered from the tower's solar array.

DIMENSIONS



SPECIFICATIONS

Model	NOMAD 4-1000-A — Single-arm solar street-lighting tower
Luminaire	Single road-optics LED luminaire — 150 W (drives up to 200 W, location dependent) · road-optics photometrics · 3000K/4000K CCT options
Luminaire mounting height	11.5 m
Overall height	11.63 M
Outreach	4.0 m single curved outreach arm · hot-dip galvanised
Solar array	1,000 W — 2 × Aspire 500 W panels on rotating T-piece mount (unit places in any orientation; array turned to face North in minutes)
Battery	1 × 10 kWh LiFePO4 (standard), integrated in base · optional 2 × 10 kWh for auxiliary loads (cameras, sensors, site devices)
Controller	KX1000 smart controller — selectable automatic power scaling or fixed LED power output (lighting-standard dependent)
Lighting compliance	AS/NZS 1158 category V1–V5 (certified lighting design supplied per project)
Connectivity (optional)	Satellite remote monitoring & control
Base dimensions (L × W × H)	1,500 × 1,500 × 1,106 mm · integrated forklift pockets · batteries and control gear housed in vandal-resistant base
Base weight — empty	548 kg (transport weight, excluding ballast)
Ballast	Site-sourced ballast, filled on site to the engineered ballast schedule (wind region and terrain category per AS/NZS 1170.2)
Base weight — ballasted	≈ 3.9 t nominal (ballast-schedule dependent)
Structure	Fixed (non-telescopic) hot-dip galvanised column · designed to AS/NZS 1170.2
Deployment	Forklift / crane placement → on-site ballast fill → array rotated north. No concrete footings, no trenching, no grid connection.
Operation / warranty	Zero fuel · zero noise · zero emissions · 10-year structural warranty per GFS terms & conditions