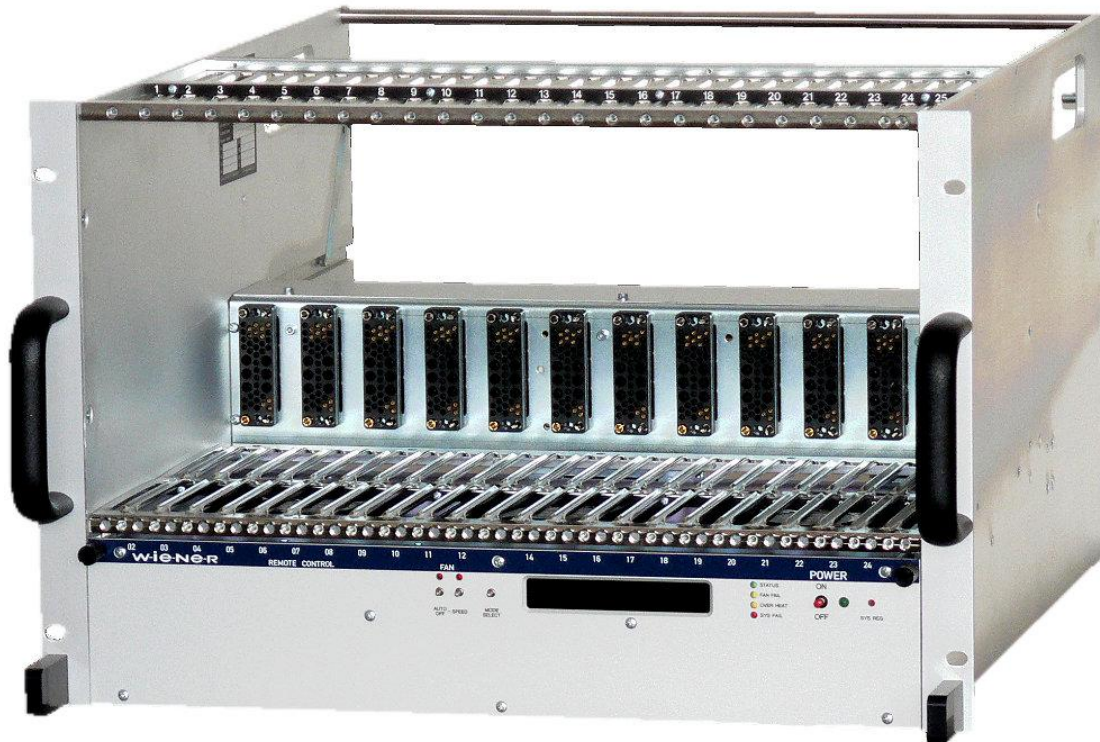


NIM 6000 Series



NIM 6000 Series Tray Bulletpoints

- Power range: 1500 W to 2700 W linear regulated PSU
- Outputs: ± 6 V, ± 12 V, ± 24 V
- 12 slots for NIM modules
- 7U height, 19" rack-mount design
- Designed for high-power, low-noise applications
- Rugged chassis for long-term use

Electrical Parameters:	
Inputs	
Mains input range	106–230 VAC $\pm 15\%$ (90...265 VAC)
Input current	Sinusoidal, 16 A for suffix H, 32 A for suffix K
Inrush current	Limited, soft-start via microprocessor control
Input fuse	external, internal on request
Outputs	
Number of channels	Up to 8 independent floating DC outputs (modular and expandable)
Output Voltages	Configurable (e.g. ± 6 V, ± 12 V, ± 24 V; actual per-module ranges depend on installed modules)
Output Power	Up to 3 kW total DC (depending on configuration, e.g. 1 kW–3 kW for 3U box, up to 6 kW for 6U box)
Overvoltage protection	Crowbar trip-off at $\sim 125\%$ of nominal voltages
Overcurrent protection	Adjustable fold-back and trip-off per module
Ripple and Noise	Very low—thanks to VHF switching technology with RF shielding; typical figures < 10 mVpp
Efficiency	75–85 %, depending on installed modules
Monitoring & Control	
Voltage	Microprocessor-controlled regulation, protection, and monitoring
Current	Fully monitored and controllable via embedded processor
Status LED	Per-channel (module) status indicators included
Isolation	
Input - Output	Complies with CE EN 60950, ISO 380, VDE 0805, UL 1950, C22.2-950
Input - Chassis	Clean-earth wiring provided
Output - Chassis	-
Environment and Cooling:	
Operation temperature:	0...50 °C ambient (no derating required)
Cooling media	Internal DC blower fans (built-in), optionally supplemented by fan trays with controllable fans (temperature or manually regulated)
Mechanical Parameters	
Dimensions	19" rack-mount, 7U height crate (≈ 620 mm depth)
Weight	Approximately 12 kg (crate only); optional fan tray adds ~ 5.4 kg
Input Connector	IEC-standard or power cord (H: removable cord, K: fixed cord for higher current)
Output connector	Standard NIM backplane connectors for power and sense
Mounting	Rack installation in 19" cabinet
Other	
Communication Protocols	CAN-bus standard for crate-level and module-level monitoring/control

	Optional interfaces via fan tray variants: Ethernet, RS-232
Reliability	Long Mean Time Before Failure (MTBF)—blower fans: >65,000 h at 40 °C; electronics: >100,000 h at 40 °C Intelligent thermal control: fans ramp up at preset temps; automatic shutdown on critical overheat Crowbar discharge ensures safe shutdown upon fault or trip-off Microprocessor + PPM (Power Protection Memory) prevents incompatible module/crate combinations
Warranty / Maintenance	2 years / 5 years

Electrical, Environmental & Compliance Data

Main Power

- **Output Voltages / Currents:** $\pm 6\text{ V}$, $\pm 12\text{ V}$, $\pm 24\text{ V}$ (high-current capacity, depending on PSU variant and installed modules)
- **Maximum total power:** 1500 W to 3000 W (depending on crate size and configuration)
- **Low-noise linear regulation** suitable for precision electronics
- **Stable operation** under varying load conditions, with crowbar and fold-back protection

Auxiliary Power

- **May include additional outputs** depending on configuration and installed power modules

Compliance

- **NIM standard** (AEC report TID20893)
- **CE conformity**

Environmental

- **Operating temperature:** 0 °C to +50 °C (derating above 40 °C by 2 %/°C, max. 60 °C)
- **Storage temperature:** -20 °C to +80 °C
- **Rugged steel/aluminum chassis** with integrated blower fans or fan trays for high-power forced-air cooling

Communication / Monitoring

- **CAN-bus interface** for DC voltage monitoring and remote on/off
- **Optional fan tray variants** with Ethernet and RS-232 for extended remote monitoring

Kontron Hartmann Wiener GmbH

Linde 18
51399 Burscheid
Tel.: +021746780
info.we@kontron.com

www.kontron.com/kontron-hartmann-wiener