

TELEMETRY SCHEMA VERSION 1.0

Required timing, torque, temperature, power, and autonomy signals for official broadcast overlays and referee adjudication.

VERSION	HOST CITY	EVENT	STATUS
1.0	TEL AVIV	18-19 MAY 2027	OFFICIAL

ISSUED BY RACE CONTROL // P.AI GAMES TECHNICAL DEPARTMENT

TRANSPORT

- JSON Lines over the arena read-only uplink, 100 Hz minimum.
- Monotonic clock in microseconds, synchronised at grid formation.
- One record per control tick; no batching above 20 ms.

REQUIRED FIELDS

t_us	integer	Monotonic timestamp in microseconds
trial	string	Trial code, T-01 to T-06
joint_torque_nm	float[]	Per-joint torque, ordered by the declared kinematic chain
joint_temp_c	float[]	Per-joint temperature in Celsius
grip_force_n	float	Peak end-effector normal force
cog_xyz_mm	float[3]	Whole-body center of gravity in world frame
pack_v	float	Battery pack voltage
pack_a	float	Instantaneous current draw
energy_j	float	Cumulative energy since lights-out
inference_ms	float	Onboard policy latency for the tick
autonomy_flag	bool	True only when no external input was present

VALIDATION

Race Control rejects any run whose telemetry stream drops below 100 Hz for more than 250 ms or whose autonomy flag is false at any sample.