Pacer Laser Contract

Description Portable **laser pacing device** for swimming

Customers **Triathletes & Recreational Swimmers**

Market **Sports** training

Customer Need	Attributes	Metric	Engineering Specifications
Constant pace	Precision of swimmer speed	Speed of laser line (m/s or yards/s)	Constant linear speed (+/- 0.1 m/s) but adjustable (0 to 3 m/s)
Laser visible to the swimmer	Visibility of laser	Distance from which laser is still visible (m)	8 m (eye to pool floor)
Can be submerged in water	Waterproof	Waterproof rating (IPX-8)	5 m depth for 5000 hrs
Lasts an entire workout	Battery life	Time for batteries to drain (hours)	More than 2 hrs
Can be mounted on walls in different swimming pools	Adhesion force	Load (kN)	At least 100 N
Portable	Convenient weight & size	Mass (kg) & dimensions (mm) of device	Less than 5kg & less than 330 x 250 x 150 mm
Electrical safety	No underwater charging & not leak AC	Circuit breakers & Charging with AC-DC transformer	Device cannot be used when plugged into mains / Circuit runs on DC
Laser safe for the swimmer	Brightness of laser	Power rating of laser (mW)	At most 5 mW