PERIMETER · RAZOR MESH WITH STRAIN-GAUGE SENSORS

D-Razor Mesh

L3 Layer · The perimeter line

Welded razor-blade mesh built to resist climbing and cutting, with D-FENCE strain-gauge sensors reporting every attempt 24/7.



KEY BENEFITS

01 **Hard to climb, hard to cut**
Razor blades welded into a diamond mesh on a high-strength galvanised core wire.

02 **Every attempt reported**
Strain-gauge sensors and controllers watch the fence 24/7 and flag the attacked zone.

03 **Sized to the risk**
Heights from 1.2 m to 2.4 m and above; mesh size and blade profile to specification.

HOW IT WORKS

01 **Razor mesh barrier**
Welded razor-blade mesh panels on steel posts, on the ground, on walls or on an existing fence.

02 **Strain-gauge sensors**
Sensors on the posts feel the force of a climb or cut.

03 **Controller**
Proprietary algorithms decide in real time; each zone covers up to 90 m.

04 **Alarm out**
Dry contact or RS232 / RS485 to your control room, cameras and alarm system.

SPECIFICATIONS

Material	High-tensile galvanised or stainless steel; razor wire reinforced with a core wire
Core wire diameter	2.5–3.0 mm
Blade thickness	0.5 mm
Mesh size	150 × 300 mm, 200 × 200 mm or 100 × 150 mm (customisable)
Blade profile	BTO-10, BTO-22 or CBT-65; blade spacing 26–34 mm
Coating	Electro-galvanised, hot-dip galvanised or PVC-coated
Height	1.2 m, 1.8 m, 2.1 m, 2.4 m or higher
Roll length	6–10 m
Posts	Steel, Ø 48–60 mm, set in concrete
Fence length	No fixed limit (practical limitation)
Length of system zone	Not exceeding 90 m
Unit dimensions	250 × 55 × 25 mm, 200 g
Processing unit	Up to 24 sensors
Dry contact	N.O. & N.C.

Power supply	48 VDC / 12 VDC
Communication output	RS232 / RS485
Operating temperature	+72 °C to –25 °C
Storage temperature	+80 °C to –32 °C
Humidity	95 %
Corrosion	All parts treated to MIL T 152
Lightning & electronic transients	MIL STD 9094
EMI & RFI	MIL STD 461, 462
False alarm rate (catalogue)	Less than 1 per km per 3 months
MTBF sensor	4.7×10^8 hours
MTTR	30 minutes
Warranty	10 years on the sensors

TENDER SPECIFICATION TEXT

1. GENERAL

The system shall be D-Razor Mesh by D-FENCE Electronic Fencing and Security Systems Ltd. (ISO 9001:2015 certified quality management), or an approved equivalent that meets every requirement in this section.

2. FUNCTION

Welded razor-blade mesh built to resist climbing and cutting, with D-FENCE strain-gauge sensors reporting every attempt 24/7.

3. THE SYSTEM SHALL PROVIDE

- **Welded diamond mesh:** Small sharp blades welded together into a diamond pattern.
- **Strong core:** High-strength galvanised steel core wire, hard to cut.
- **Anti-climb options:** Angled brackets or a double razor coil on top; barbed wire can be added.
- **Flexible installation:** On the ground, on walls or on existing fences.
- **Sensor-ready:** Works with D-FENCE strain-gauge sensors and controllers, 24/7.

4. TECHNICAL REQUIREMENTS

- **Material:** High-tensile galvanised or stainless steel; razor wire reinforced with a core wire
- **Core wire diameter:** 2.5–3.0 mm
- **Blade thickness:** 0.5 mm
- **Mesh size:** 150 × 300 mm, 200 × 200 mm or 100 × 150 mm (customisable)
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- **Coating:** Electro-galvanised, hot-dip galvanised or PVC-coated
- **Height:** 1.2 m, 1.8 m, 2.1 m, 2.4 m or higher
- **Roll length:** 6–10 m
- **Posts:** Steel, Ø 48–60 mm, set in concrete
- **Fence length:** No fixed limit (practical limitation)
- **Length of system zone:** Not exceeding 90 m
- **Unit dimensions:** 250 × 55 × 25 mm, 200 g
- **Processing unit:** Up to 24 sensors
- **Dry contact:** N.O. & N.C.
- **Power supply:** 48 VDC / 12 VDC
- **Communication output:** RS232 / RS485

- **Operating temperature:** +72 °C to –25 °C
- **Storage temperature:** +80 °C to –32 °C
- **Humidity:** 95 %
- **Corrosion:** All parts treated to MIL T 152
- **Lightning & electronic transients:** MIL STD 9094
- **EMI & RFI:** MIL STD 461, 462
- **False alarm rate (catalogue):** Less than 1 per km per 3 months
- **MTBF sensor:** 4.7×10^8 hours
- **MTTR:** 30 minutes
- **Warranty:** 10 years on the sensors

5. DETECTION SEQUENCE

1. **Razor mesh barrier:** Welded razor-blade mesh panels on steel posts, on the ground, on walls or on an existing fence.
2. **Strain-gauge sensors:** Sensors on the posts feel the force of a climb or cut.
3. **Controller:** Proprietary algorithms decide in real time; each zone covers up to 90 m.
4. **Alarm out:** Dry contact or RS232 / RS485 to your control room, cameras and alarm system.

6. SUBMITTALS

Before installation, the contractor shall submit the manufacturer's datasheet, the installation instructions and the zone layout for approval.