

Radar Environmental Configuration Review Checklist

For dust, salt fog, coastal, hot, humid and industrial environments

Purpose: Complete this worksheet before requesting a coverage concept, configuration review, or project proposal. Attach drawings/maps where requested. Unknown items may be marked TBD.

1. Project Environment Profile

Location / site	Country/Region: _____ Distance from coast: _____ km Elevation: _____ m
Temperature	Operating min: _____ °C max: _____ °C Daily swing: _____ °C Direct solar exposure: Y / N
Humidity / rain	Max RH: _____ % Condensation risk: Low / Med / High Heavy rainfall / monsoon: Y / N
Dust / sand	☐ Light dust ☐ Heavy industrial dust ☐ Sandstorm Estimated particle exposure / cleaning interval: _____
Salt / corrosion	☐ Inland ☐ Coastal ☐ Marine / splash ☐ Industrial chemical atmosphere Notes: _____
Wind / lightning	Design wind: _____ m/s Lightning exposure: Low / Med / High Grounding system available: Y / N

2. Environmental Claim-to-Evidence Matrix

Claim / Requirement	What to Verify	Evidence to Request	Status
Ingress protection	Enclosure IP rating and scope	Test report / certificate / product datasheet	☐ OK ☐ Gap
Salt / corrosion resistance	Material, coating, connectors, fasteners, radome	Salt-mist/corrosion test evidence + construction details	☐ OK ☐ Gap
High temperature operation	Ambient range vs solar load / internal thermal design	Thermal test report / derating notes / fan-filter design	☐ OK ☐ Gap
Low temperature operation	Cold start, heaters, condensation management	Low-temperature test evidence / start-up procedure	☐ OK ☐ Gap
Dust / sand exposure	Sealing, filters, pressure equalization, maintenance	Ingress/dust test evidence + filter/cleaning schedule	☐ OK ☐ Gap
Wind loading	Mounting structure, antenna/radome load, vibration	Mechanical/wind-load calculation or approved mounting data	☐ OK ☐ Gap
Lightning / surge	Grounding, SPD, shield bonding	Electrical protection architecture / installation manual	☐ OK ☐ Gap

Note: An IP rating does not by itself prove salt-fog/corrosion performance. Environmental claims should be matched to the applicable test method, configuration and exposure severity.

3. Installation & Maintenance Review

Item	Project question	Requirement / Decision
Mounting material	Galvanized / coated steel / stainless / aluminum? Dissimilar-metal risk?	_____
Connectors / glands	Outdoor rating, sealing, drip loops, cable bend	_____

Item	Project question	Requirement / Decision
	radius	
Radome / antenna face	Cleaning access, salt/dust buildup, UV exposure	_____
Ventilation / filters	Service interval, spare filters, blockage alarm	_____
Drainage / condensation	Breather, desiccant, heater, enclosure drain	_____
Grounding / bonding	Earth resistance target, shield termination, SPD coordination	_____
Spares	Fans, filters, seals, connectors, fuses, surge devices	_____

4. Evidence Package Requested from Supplier

Document / Evidence	Received?	Notes / Validity / Applicable Model
Approved product datasheet / master data	Y / N	_____ —
Ingress protection evidence	Y / N	_____ —
Environmental test reports	Y / N	Temperature / humidity / vibration / other
Salt-mist / corrosion evidence, if required	Y / N	_____ —
Mechanical / wind-load mounting guidance	Y / N	_____ —
Installation, grounding and surge protection manual	Y / N	_____ —
Preventive maintenance schedule + spare-parts list	Y / N	_____ —

5. Review Outcome

Configuration status	☐ Suitable as specified ☐ Suitable with project-level protection ☐ Additional evidence required ☐ Not recommended yet
Open items	_____ _____
Next action	☐ Configuration review ☐ Site survey ☐ Evidence request ☐ Mounting redesign ☐ Other: _____

Submission & Review

Prepared by Name / Company: _____	Contact Email / Phone: _____	Date / Version Date: _____ Ver.: _____
Attachments: ☐ Site plan / GIS / KMZ ☐ Photos ☐ Existing system diagram ☐ Datasheets ☐ Other: _____		

Note: Midradar may request additional project data before providing a coverage concept or configuration recommendation. Final performance depends on target characteristics, environment, installation geometry, system configuration and acceptance criteria.