STAR INXS
SOLUTIONS PVT LTD

DRONES & UNMANNED SYSTEMS
PRODUCT BROCHURE

PERSISTENT OVERWATCH

TETHERED UAV



12+ H ALOFT • FIBRE-OPTIC LINK • FREE FLIGHT

12+ H TETHERED	120+ M AGL	30× DAY ZOOM	640 THERMAL	FIBRE-OPTIC LINK

TETHERED QUAD-ROTOR SURVEILLANCE UAV WITH FREE-FLIGHT MODE

DESIGNED & BUILT IN INDIA · STARINXS.COM

OVERVIEW

TETHERED QUAD-ROTOR SURVEILLANCE UAV WITH FREE-FLIGHT MODE

A tethered quad-rotor surveillance drone that stays aloft for 12 hours or more on ground power, sends control and video over a fibre-optic tether with no radio, and can release the tether for a free flight of 35 minutes or more.

The aircraft climbs to 120 m or more on a 150 m tether that carries 3 kW of power and a fibre-optic data link, while a motorised winch pays the tether out and reels it in automatically. When the mission moves, the operator releases the tether in the air and the drone flies on by itself.

12+ h	120+ m	35+ min	30×
TETHERED ENDURANCE	OPERATING HEIGHT	FREE FLIGHT	DAY-CAMERA ZOOM

AT A GLANCE

12+ H TETHERED	120+ M AGL	30× DAY ZOOM	640 THERMAL	FIBRE-OPTIC LINK

WHY IT STANDS OUT

01 ***12+ HOURS ALOFT***
Powered from the ground station.

02 ***FIBRE-OPTIC LINK***
Control and video with no RF when tethered.

03 ***FREE-FLIGHT RELEASE***
Tether separation at 50 m or above.

04 ***BACKUP POWER***
30+ minutes on board if ground power fails.

FEATURES

PERSISTENT OVERWATCH
12+ hours on tether power.

NO-RF TETHERED LINK
Fibre-optic command and video.

EO/IR PAYLOAD
30× day zoom and a 640 × 480 thermal camera.

DETECTION
Human-sized targets at 1,500 m by day and 700 m at night.

FAIL-SAFES
Return-to-home on link loss; 30+ minutes of backup power.

TWO-PERSON SET-UP
Rigged in under 15 minutes.

EVENT AND CROWD SECURITY
Hours of overwatch above crowds, with a public-address payload.

TECHNICAL SPECIFICATIONS

TECH SPECS

SPECIFICATIONS	
Tethered endurance	12+ h
Free-flight endurance	35+ min
Tethered altitude	120+ m AGL
Tether length	150 m
Tether station output	3,000 W
Base station weight	≤ 40 kg
Free-flight range	2 km
Wind	35 km/h sustained, 50 km/h gusts
Operating temperature	−10 °C to +55 °C
Day camera	1920 × 1080, 30× optical zoom
Thermal camera	640 × 480, white-hot / black-hot
Human detection	1,500 m day, 700 m night
Link, tethered	Fibre optic, no RF
Link, free flight	2.4 / 5.8 GHz
Backup power	30+ min aloft after ground-power loss
Set-up	Under 15 min, two-person team

Figures are typical values for a standard configuration and may change without notice. Dimensions marked ≈ are indicative.



WHAT COMES WITH IT

TETHER GROUND STATION
STANDARD

3 kW power, a 150 m tether and an automatic winch, under 40 kg.

RUGGED GROUND CONTROL
STANDARD

MIL-STD-810G ground control with moving map, live video and joystick payload control.

PUBLIC-ADDRESS PAYLOAD
An airborne loudspeaker for crowd management, tethered or in free flight.

COMMAND-CENTRE INTEGRATION
Live video, fleet position and alerts sent to your command and control centre.

POSSIBLE ENHANCEMENTS

TARGET DETECTION AND FOLLOWING
On-board detection that locks on and follows a target.

NIGHT AND LOW-LIGHT TRACKING
Tracking and following after dark.

VISUAL NAVIGATION
Navigation where GNSS is denied or jammed.

STANCE AND GAIT DETECTION
Flags threatening posture with an active alert.

PRECISE VISUAL LANDING
Lands on a marked point without GNSS.

SWARMING (IN DEVELOPMENT)
Cooperative missions with other drones and ground robots.

APPLICATIONS

EVENT AND CROWD SECURITY
Hours of overwatch above crowds, with a public-address payload.

BASE AND PERIMETER PROTECTION
A permanent eye over camps, borders and installations.

INCIDENT COMMAND
An aerial view for responders at the scene.

12+ H ALOFT • FIBRE-OPTIC LINK • FREE FLIGHT

Every option above can be built in for your requirement. Ask for it in your enquiry to contact@starinxs.com.

WHY STAR INXS

IN-HOUSE COMPOSITES
Airframes designed, moulded and built in our own facility.

DESIGNED IN INDIA
Indigenous design and engineering in the air, under water, in simulation and on the range.

ON-BOARD INTELLIGENCE
Detection, tracking and visual navigation where GNSS fails.

TURNKEY DELIVERY
From site survey and design to installation and training.

TENDER READY
Documentation and compliance support for GeM and defence portals.

LIFECYCLE SUPPORT
Training, spares and maintenance after delivery.

FROM REQUIREMENT TO SUPPORT

01 REQUIREMENT

02 DESIGN & ENGINEERING

03 PROTOTYPE & VALIDATION

04 PRODUCTION & INTEGRATION

05 DEPLOYMENT & SUPPORT

DESIGNED, BUILT AND SUPPORTED IN INDIA

- OFFICES IN NEW DELHI AND BHOPAL
- GEM AND DEFENCE TENDERS
- CUSTOM AND OEM BUILDS
- TRAINING, SPARES AND MAINTENANCE

STAR INXS SOLUTIONS PVT LTD

Request a quote, a demonstration or the full data pack for Tethered Surveillance UAV.

EMAIL	contact@starinxs.com
WEB	starinxs.com
NEW DELHI	Registered office
BHOPAL	Madhya Pradesh
BUYING	Direct enquiry, GeM and defence tenders. We reply within one business day.

WHATSAPP ONLY
+91 98112 22446

Scan for the Tethered Surveillance UAV page

© 2026 Star INXS Solutions Pvt Ltd. Specifications may change without notice. Images may show optional equipment.