



HANSA 3(NG)



AIRFRAME & COCKPIT

With a full bubble canopy, offering easy cockpit ingress/egress, dual controls with control-stick, rudder pedals and push-pull rods and comfortable seats, the HANSA-3(NG) aircraft definitely is best in its class. With excellent flying characteristics, having a sealevel climb rate of 570 fpm, a cruise of over 100 KCAS, and a take-off distance close to 1,600 feet over a 50 foot obstacle, HANSA-3(NG) offers excellent performance. With a slow 42 KCAS stall speed, the HANSA-3(NG) is stable and has good flying qualities.

With all Glass Cockpit and cabin width of 43 inches HANSA-3(NG) offers comfortable seating with ergonomically designed seats to fit tall as well as shorter pilots/occupants equally well. With low wing, bubble canopy along with rear windows offers excellent view of the surroundings to pilot for comfortable flight. Ample storage space in the cockpit for baggage.

Advanced composite materials and latest manufacturing techniques offers smooth contour and excellent surface finish resulting in lower drag. Infinite airframe life, minimum maintenance & easy to repair in case of any damage. With a coat of conductive paint and lightning protection offers protection from adverse weather conditions. The airframe is modular; control surfaces to entire wings and other major assemblies can be replaced individually, in case of damage.

Rugged spring steel main landing gear and elastomeric shock nose landing gear are tough enough for flight training and are virtually maintenance free. It comes with optional steerable oleo type nose gear.

The optimized new cowling offers improved cooling in hot weather and reduces drag while improving access to the powerplant.



PROPULSION

Advanced fuel injected Rotax 912 iSc3 Sport engine having best in class fuel efficiency along with light weight 2-bladed composite propeller. The engine installation is designed for durability and easy maintenance, easy access to filters and regular maintenance items, and quickly removable cowlings.

AVIONICS

HANSA-3(NG) offers advanced digital display (glass cockpit) system using certified instruments. Two PFDs conveniently located along with independent sensors and inbuilt redundant power supply offers reliable flight parameters at all times. Centrally located Digital Engine Display unit offers engine parameters with inbuilt caution/warning panel ensures safe operation of engine.

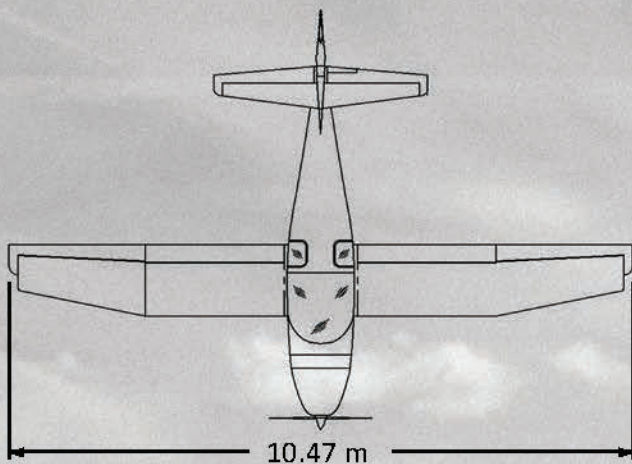
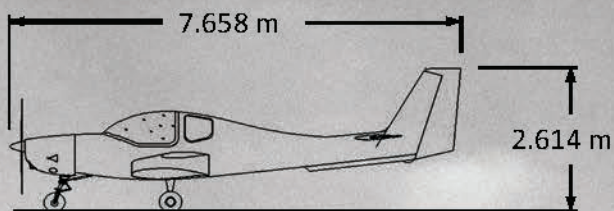
NAV/COM/GPS with touch screen, moving map, FMS, ILS and ADS-B out, Secondary COM, AMU & MODE-S TRANSPONDER offers best in class avionics. Equipped with ELT to meet regulatory requirements.

STANDARD FEATURES & OPTIONS



AIRFRAME & SYSTEMS

- All composite airframe structure
- Fixed leaf spring main landing gear
- Fixedfree castor type nose landing gear with elastomeric shock absorber
- Hydraulic Powered Disc Brakes
- Electric flap
- 43 inch wide cabin
- Bubble canopy
- Composite fuel tank
- Adjustable rudder pedals
- 13.2V Li-on batteries with integrated BMS
- Landing and taxi lights
- LED position lights
- Cabin lights
- Lightning protected
- Baggage compartment



POWERPLANT

- Rotax 912 iSc3 Sport engine
- Composite 2-bladed variable pitch MT Propeller
- Fuel: AVGAS 100 LL / MOGAS (Under Certification)
- Max. Usable Fuel: 95 lts (25.1 US Gallons)

WEIGHTS

- Max Takeoff Weight : 750 kg
- Max Landing Weight : 750 kg
- Standard Empty Weight : 550 kg
- Useful Load : 200 kg
- Max Fuel Weight : 69 kg
- Full Fuel Payload : 131 kg
- Max Baggage : 10 kg



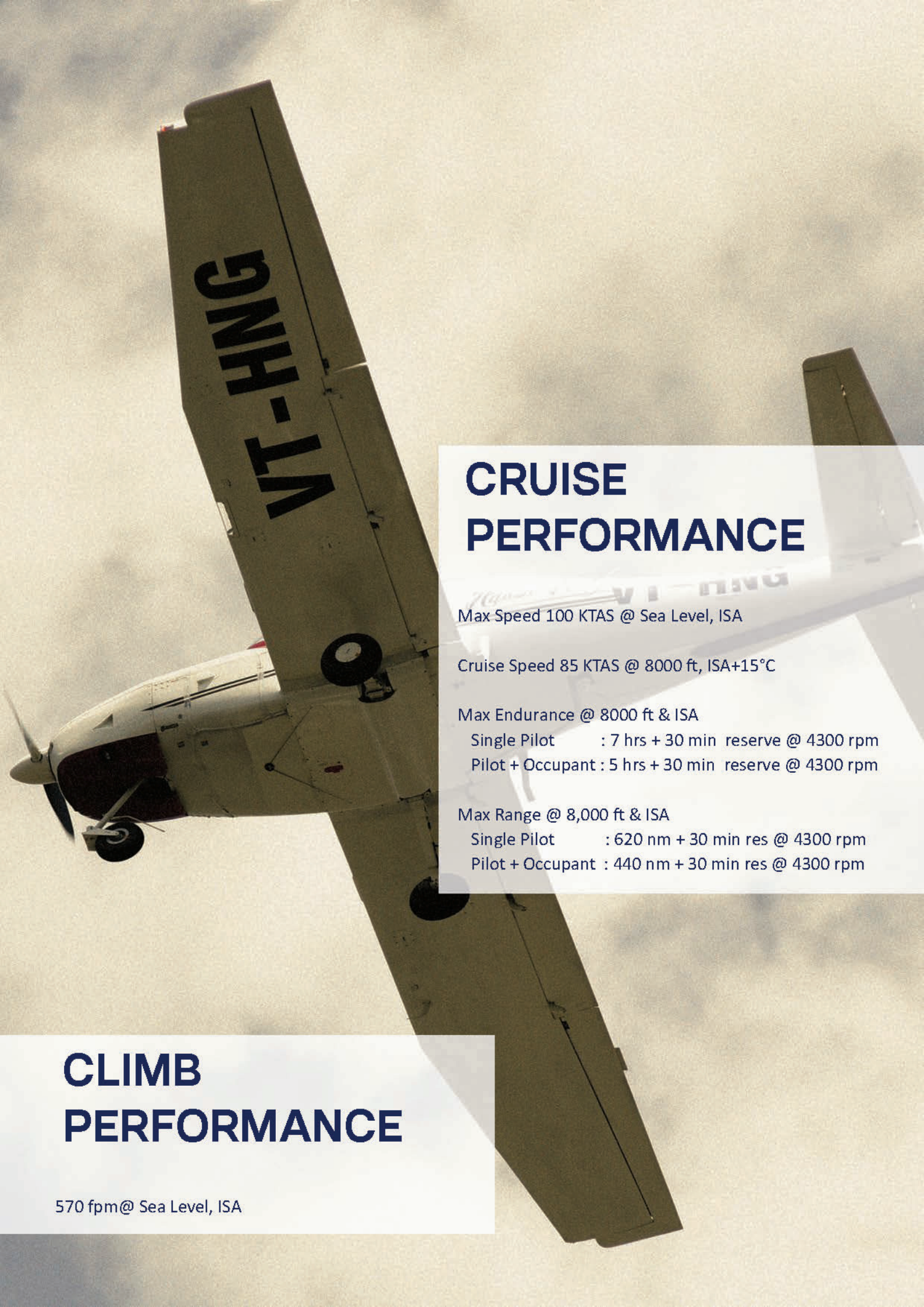
AVIONICS

- Dual EFD 1000 Pro Primary Flight Display (PFD)
- Stock RS Flight System EMU 912 iS
- AVIDYNE IFD 440 NAV/COM/GPS with ADS-B out enabled
- GARMIN GTR 225A (Secondary COM)
- AVIDYNE AXP340 Transponder
- AVIDYNE AMX 240 Audio Management Unit
- 406 MHz ELT
- Certified to DAY & NIGHT VFR

OPTIONAL FEATURES

- Steerable Oleo Nose landing gear (Under Certification)





CRUISE PERFORMANCE

Max Speed 100 KTAS @ Sea Level, ISA

Cruise Speed 85 KTAS @ 8000 ft, ISA+15°C

Max Endurance @ 8000 ft & ISA

Single Pilot : 7 hrs + 30 min reserve @ 4300 rpm

Pilot + Occupant : 5 hrs + 30 min reserve @ 4300 rpm

Max Range @ 8,000 ft & ISA

Single Pilot : 620 nm + 30 min res @ 4300 rpm

Pilot + Occupant : 440 nm + 30 min res @ 4300 rpm

CLIMB PERFORMANCE

570 fpm @ Sea Level, ISA

RUNWAY PERFORMANCE (@ SL)

T/O Dist @ MTOW (to 50 ft)

@ ISA : 490 m (1607 ft)

@ ISA+ 15°C : 525 m (1722 ft)

LDG Dist @ MTOW (from 50 ft)

@ ISA : 450 m (1476 ft)

@ ISA + 15°C : 470 m (1541 ft)

CEILING

Certified Ceiling, Normal Ops 10,000 ft



For More Information Contact



Director, CSIR-NAL,
PB No 1779, HAL Airport Road, Bengaluru-560 017 / director@nal.res.in,
www.nal.res.in