







There is simply nothing more emotional and engaging than leaving your daily routine, finally flying to the mountains, reaching that remote valley, landing beside a twisty river. You jump out of the plane, starting to breathe deeply, after that incredible landing. Instead of the smog and the noise of the city, you now scent pine trees flagrance while the fresh and clean air, simply floods your lungs. Nobody is around you and the only sound is now coming by the smooth flow of that river. You might as well spend a couple of nights there, sleeping inside your own airplane... To live this kind of freedom and to offer this kind of performances, represent our vision and what we mean for "Backcountry flying".

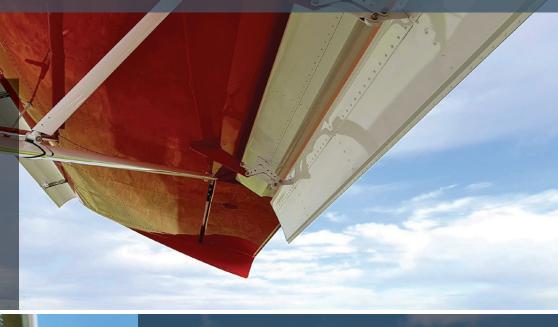




AERODYNAMIC AND HIGH LIFT DEVICES

Wing's camber:

the biggest innovation in the Norden's wing, is the capacity of changing to a large extent its camber, dramatically increasing the lift coefficient at low speed while still being able to manage a drag reduction at higher speeds, particularly welcome, when you are using smallest wing size, with the intent to increase the top and cruise speed.



1) Electric Retractable Slats:

our slats are designed to offer a serious extension of the wing's leading edge, that will change its geometry. This kind of modification produces not only a change in lift but also increases the drag. At lower speeds this extra drag is acceptable because the increase of the stall angle and lift is beneficial. But at higher speeds the increase of drag will, of course, reduce the cruise speed and affect the fuel consumption and climb performances. This is the reason why we designed a retractable slat system. The final result is that the slatted wing will prevent the flow separation over the wing surface allowing to fly at higher angles of attack and lower flying speeds and providing important safety benefits at stall.

2) Double Slotted Flaps:

we introduced a large double slotted flap system, very efficient in increasing the lift at a defined angle of attack. The reason why double slotted flaps have been chosen was because we wanted to reduce as much as possible the flow separation on the top of their surface, using a double gap allowing more air to leak through the two slots on the top surface, increasing so the lift, allowing more efficiency and a stall speed reduction. Our slats work perfectly in combination with these large flaps, obtaining the benefit in the increase of lift, while at the same time, delaying the stall by increasing the range of angle of attack.

3) Wing Tips and vortex:

we decided to go with an inverted wing tip design that helps to increase the pressure on the bottom s-shape surface of the ailerons at high angle of attack and low speed, increasing the aileron efficiency and improving pilot control. These wing tips also help to reduce the drag at higher speeds increasing the overall performance of the plane.

4) Frise Slotted Ailerons:

we introduced new frise ailerons to increase the performance and handling qualities, reducing in the meantime the adverse yaw, limiting the pilot lateral control load, increasing the aerodynamic centering, the control harmony and the roll rate of the plane.

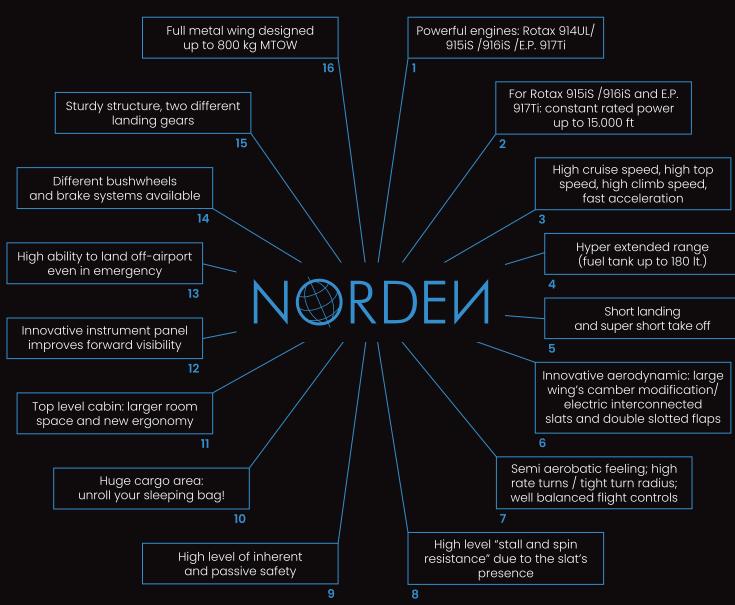
5) Electric pitch Trim:

we introduced a new electric trim, for the horizontal stabilizer, with an increased vertical excursion, to improve the settings in all flight phases, considering this airplane broad speed range.

PERFORMANCE AND SAFETY

Since the very beginning, one of the basic principles in this new project, has been the intention to gather in one single aircraft, all the desirable flying peculiarities and characteristics, a modern bush pilot could wish in our vision.





In synthesis, the Norden with its advanced aerodynamic, the inherent safety due to its High Lift Devices and solid structure, the availability of different powerful engines, the room space of his cabin mixed with its high cruising speed and the extended autonomy and the flight controls remarkable authority, allow to expand new scenarios for these kinds of aircraft and offer maneuverability qualities unencountered in airplanes of the same category.

BUILD YOUR OWN NORDEN

The Norden is available as an advanced Ultralight in the 600 kg class (mainly in Europe) and as an LSA in USA, Australia, Israel, South Africa and other Countries. The two versions differ from options and other technical specs, contact your dealer for more informations.













OPTIONALS

- Paint schemes: deluxe or even custom paint schemes offered
- Engine power: from 115 to 180 hp
- Propellers: carbon ground adjustable or CS props from 193 to 203 cm diameter
- Fuel tanks: up to 140/180 lt.
- Landing gear: porter style Ø 63,5 mm
- Wheels: double brake calipers
- Bush tires: 26"/29"/31"
- Carbon parts: cowling, instrument panel, floorboards, extended baggage, wing tips, slats, flaps
- Seats: carbon with or without leather
- Instrument panel: up to 7" Garmin, Kanardia, Dynon "full EFIS package"
- Colors for interiors: 8 colors for leather, instrument panel, seat belts, countless stitching threads
- Cargo area: extended carbon baggage
- Camping: tailored and super light mattress and pillow to sleep inside the plane



POWER PLANT

ENGINE

Standard:

Rotax 915 iS 141 hp/5800 rpm

Optional:

Rotax 914 UL

115 hp/5800 rpm

Or:

Rotax 916 iS

160 hp/5800 rpm

Edge Perf. 917 Ti 180 hp/5800 rpm

PROPELLER

Standard:

200 cm (78,7") Wooden Prop

Optional:

4 blade

Carbon Prop 203 cm Ground Adj. (80")

Constant speed Prop $193 \text{ cm} (76^{''})$

CAPACITIES

FUEL TANK CAPACITY

Standard:

100 lt (26,5 U.S.Gal.)

Optional:

- 140 lt (37 U.S.Gal.)
- 180 It (47,5 U.S.Gal.)

FUEL CONSUMPTION

75%: ~25,2 lt/h (~6,65 U.S.Gal./h)

DIMENSIONS

WING SPAN

903 cm (29,6 ft)

LENGTH

707 cm (23,2 ft)

HEIGTH WITH AL.BW

225 cm (88,5")

WING SURFACE AREA

• 14,4 m2 (155 sq ft) clean wing

• 16 m2 (172,5 sq ft) with flaps/slats extended

CABIN WIDTH

76 cm (30")

CABIN HEIGHT [Pilot position]

140 cm (55")

WEIGHTS

MAX TAKE-OFF WEIGHT

600 kg (1.322 lbs)

EMPTY WEIGHT

including optional light weight program and Rotax 915 is:

from 365 kg (804 lbs)

USEFUL LOAD

235 kg (518 lbs)

LOAD FACTOR

+6/-3 G

PERFORMANCES *

VNE

235 km/h (146 mph)

MAX SPEED S.L.

215 km/h (134 mph)

STALL SPEED

55 km/h (34 mph)

WITH FULL FLAPS/SLATS

CRUISING SPEED

185 km/h (115 mph)

Ground Adj. Prop.

CRUISING SPEED

200 km/h (124 mph)

[Constant Speed Prop.]

CLIMB RATE

up to 1.800 fpm (single pilot)

SERVICE CEILING

> 15.000 ft

RANGE 65%

up to 1.365km (850 miles)

with optional 180 It fuel tank

TAKE-OFF ROLL at MTOW

<70 m (224 ft)

TAKE-OFF ROLL

30 mt (98 ft) [single pilot]

LANDING ROLL at MTOW

<80 m (256 ft)

CROSS WIND COMPONENT (MAX.)

25 km/h (15 mph)

* [MTOW and Std. Atmosphere with Rotax 915 iS]



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