

P2002JF



SPECIFICATION AND DESCRIPTION

QUALITY AIRCRAFT SINCE 1948
TECNAM

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P2002JF

This document applies only to the Tecnam P2002JF and is published for the purpose of providing general information for the evaluation of design, powerplant, performance and equipment.



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GENERAL DESCRIPTION

P2002JF

Low Wing High Pleasure

Construction

The P2002JF is a two-seater side by side, low wing aircraft. The P2002JF features superlative performance and flying qualities, now confirmed by hundreds of P2002 ultralights, Light Sport and VLA aircraft sold throughout the world and validated in 15 countries other than Europe. The ease of piloting and maintenance make this aircraft an excellent solution for training in flight schools. It is also an ideal platform for surveillance and as well as, of course, for pure recreational and private use. The option to use 100LL AVGAS or unleaded automotive fuel (with up to 10% ethanol content) makes this aircraft even more flexible and cost effective. The P2002JF encompasses the latest developments of Tecnam aircraft. The use of advanced software for design, structural and fluidynamics analysis, and experience in building aeroplanes with all types of materials results in continuous aircraft improvement. Due to the tapered laminar aerofoil and the slotted flaps the P2002JF is an outstanding aircraft, a perfect mix of aerodynamics, performance, and structural efficiency.

Many flight schools in Europe and all over the world rely on P2002JF (certified according to the CS-VLA and validated in several foreign countries) for students initial training. Many of them continue their training up to the ATPL with the Tecnam P2006T twin making Tecnam the ideal one-stop-shop for flight training aircraft all over the world.

The Tecnam P2002JF structure is based on a steel tubing cabin truss covered by aluminium sheets. The wing is all aluminium made and built with a single spar and full metal torsion box. The wing's leading edges are easily detachable for repairs and also incorporate the fuel tanks (50 Lt - 13.2 US gallons each). They are separated from the cabin in order to maximize passive protection. The sliding canopy allows 360° of vision in the cockpit and has full rollover protection tested via inverted drop tests.

The stabilator, horizontal tail design, provides remarkable longitudinal hands-off stability along with minimum drag and weight penalty. This provides balanced two finger flight control. The wide slotted flaps, electrically activated, allow stall speed lower than 40 Kts and allows the aircraft to perform steep approaches and easier landings.

The all aluminium ailerons are effective and ensure a quick roll rate without being overly sensitive. All control surfaces are made out of aluminium and all of them, except for flaps and tab, are mass-balanced.

Landing Gear

The main landing gear are constructed of spring steel. This provides a main gear that is robust enough for unimproved landing strips and requires no service. The trailing link nose gear uses a rubber shock absorber system that was designed for the rigours of the training environment. The main landing gear wheels and brakes are 5.00x5 providing ability to use multiple different tyre brands that can be chosen in relation with the mission-type and expected landings per hour. The brake control is activated by a single central lever located between the seats or, alternatively, by toe brakes which are also available as an option. A parking brake valve is located on the console between the seats.

Powerplant and Propeller

The top and bottom engine cowls are quickly and easily removable making any maintenance procedure faster to accomplish. The top cowl has 2 large hinged gull-wing style doors for easy access and effective pre-flight inspections of the entire engine compartment.

The engine is set low and the cowling slopes down from the windshield, so forward visibility is outstanding even with a fully equipped instrument panel. The steel firewall is soundproofed.

The power plant is a Rotax 912S2 series four-cylinder, four-stroke engine. The engine is liquid and air cooled with an integrated 1:2.4286 reduction gear. The use of liquid cooled heads and air cooled cylinders allows the engine to maintain safe operating temperatures even if a rapid descent is performed immediately after a prolonged climb.

A fixed pitch wood, composite wrapped Hoffmann propeller comes standard while the hydraulic variable pitch propeller from Hoffman is also available as an option. An electrical fuel pump is installed to provide an effective back-up to the mechanical one. Circuit breakers are standard. The battery is located in the rear of the fuselage with easy access through an external hinged door. An external power socket allows for engine start, tests, and avionics management/training without the use of internal battery.

Avionics

The largest selection of avionics choices are available on the P2002JF in order to allow almost any type of operations: basic VFR-DAY equipment, VFR-NIGHT equipment. With an extremely wide choice of rack-mounted avionics, such as the latest Garmin radios and GPS, IFR training procedures (not in IMC conditions) can be possible via dual VOR indicators and radios, ADF and DME options.

Certification

The Tecnam P2002JF is delivered in full compliance with the requirements of EASA CS-VLA.



INTERIOR AND EXTERIOR

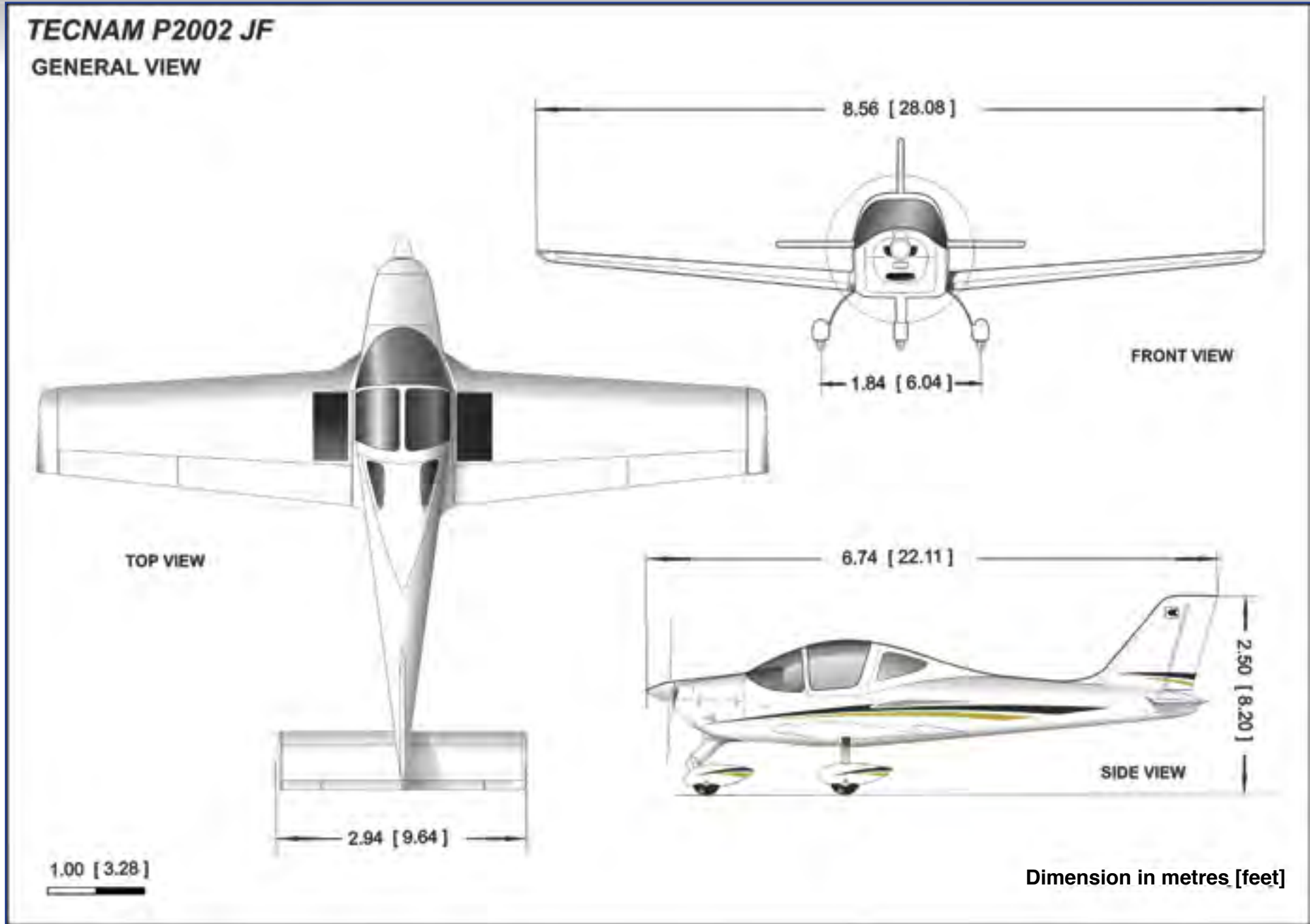
Seats are adjustable in flight and increase in height as they are moved forward.

The luggage area allowing for 44 pounds/20 kg of weight is located behind the seats with ample room for several travel bags. The interior is spacious, ergonomic and comfortable.

Cabin	ft	m
Height	3	0,91
Width	3.6	1,1

Baggage Compartment		
Width	2.62 ft	0,80 m
Length	1.48 ft	0,45 m
Volume	5.74cu.ft	162lt
Max. permissible load	44lb	20kg





P2002JF

DIMENSIONS

	ft	m
Overall Height	7.9	2,4
Overall Length	21.7	6,63

DESIGN WEIGHT AND LOADING

	P2002-JF FP	
	kg	lb
Maximum Take Off Weight	620	1,367
Empty Weight, VFR Standard	380	838
Useful Load	240	529
Baggage allowance	20	44

WING

	ft	m
Span (overall)	28.2	8,6
Area	123.8 ft ²	11,5 sqm
Dihedral	5°	
Aspect ratio	6.4	

PERFORMANCE

	P2002-JF			
	Fixed Pitch Propeller		Variable Pitch Propeller	
Max Cruise Speed KTAS	122 kts	226 km/h	128 kts	237 km/h
Stall Speed (Flaps Down Power Off) KCAS	41 kts	76 km/h	41 kts	76 km/h
Practical ceiling	14000 ft	4267 m	14000 ft	4267 m
Take off run	777 ft	237 m	630 ft	192 m
Take off distance	1286 ft	392 m	1083 ft	330 m
Landing run	538 ft	164 m	446 ft	136 m
Landing distance	1056 ft	322 m	1099 ft	335 m
Rate of climb	874 ft/min	4,4 m/sec	950 ft/min	4,8 m/sec
Range	568 NM	1502 km	568 NM	1502 km

All estimated performance data are based on aeroplane weights at MTOW; standard atmospheric conditions; level, hard surface, dry runways, no wind.

POWERPLANT & ACCESSORIES

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ROTAX 912 S2/3

ROTAX[®]
AIRCRAFT ENGINES



- 4-cylinders
- 4-stroke liquid-/air-cooled engine with opposed cylinders
- Dry sump forced lubrication with separate oil tank, automatic adjustment by hydraulic valve tappet
- Mechanical fuel pump
- Dual electronic ignition
- Propeller speed reduction unit
- Air intake system
- Gearbox Reduction Ratio 2.43:1



STANDARD EQUIPMENT

FLIGHT INSTRUMENTS AND INDICATORS

Magnetic Compass
 Airspeed Ind., Kts
 Altimeter (In)
 Vertical Speed
 Attitude Gyro
 Directional Gyro
 Turn And Bank Indicator
 Flaps Indicator
 Pitot System
 Static System
 Stabilator Trim Position Indicator

ENGINE INSTRUMENTS

RPM Indicator
 Hour Recorder
 Oil Press
 Oil Temp.
 Head Temp.
 Fuel Press.
 Voltmeter
 Ammeter
 LH + RH Fuel Qty

OTHER INSTRUMENTS / WARNING

Chronometer
 O.A.T. Indicator
 Generator Warning Light
 Vacuum Suction Gauge

FLIGHT CONTROLS

Hydraulic Brakes
 Parking Brake
 Electrical Flaps
 Dual Flight Controls
 Steerable Nose Wheel
 Stabilator Trim (electric actuated from stick)
 Engine Controls
 _ Throttle, Two
 _ Carburettor Heat
 _ Choke
 Flight Trim Controls
 _ Stabilator With Indicator
 Fuel Control Selector with On/Off
 Panel Switches:
 _ Starter
 _ Fuel Pump
 _ Engine LH And RH Ignition Switches

ELECTRICAL SYSTEM

12 VOLT 18AMP. Battery
 12 VOLT Alternator 20 AMP.
 Switches
 _Nav. Lights
 _Landing Light
 _Strobe Light
 External Power Supply Receptical
 Circuit Breaker Panel

FUEL SYSTEM

Two Integral Fuel Tanks with 100 litres / 26.42
 US Gal total capacity
 Engine Driven Fuel Pump
 Auxiliary Fuel Pumps, electric
 Fuel Quick Drain
 1 X Shut Off And Fuel Selector Valve ANDAIR

INTERIOR

Pilot And Copilot Seats
 _ adjustable fore and aft
 Seat Belts & Shoulder Harness, all seats
 Wall To Wall Carpeting
 Luggage Compartments
 Fire Extinguisher
 Radio Call Plate
 Soundproofing
 First Aid Kit
 Emergency Hammer

EXTERIOR

Epoxy Corrosion Proofing, all structure
 Sliding Canopy with Lock And Key
 Rear Window
 Tie Down Rings
 Main Wheels, 5,00 X 5 Cleveland
 Nose Wheel, 5,00 X 5

EXTERIOR LIGHTS

Nav. Lights LED with strobe AVEO Full LED
 TSO
 Taxi Light LED

CABIN CONFORT SYSTEM

Windshield Defroster
 Ventilator Adjustable, 2 Place
 Heating System

POWERPLANT AND PROPELLER

Engine - 1 ROTAX 912S2 100 HP, 4 Cylinders
 Liquid/air cooled, integrated reduction gear
 Dual Ignition System
 Throttle Control LH/RH
 Tubular Steel Engine Mount
 Propeller - Hoffmann, 2 Blade Fixed Pitch
 Propeller Spinner
 Air Filter
 Oil Filter
 Oil And Water Coolers
 Carburettor Heat with Manual Control
 Thermostat Valves Oil and Water

PRODUCT SUPPORT/DOCUMENTS

Manufacturer Full Two Year Limited Warranty
 Pilots Operation Handbook
 Maintenance Manual
 Parts Catalog
 Aircraft Log Book
 Engine Log Book

STANDARD AVIONICS DAY VFR



STANDARD GARMIN AVIONIC PACKAGE

GMA 345 Audio Panel

GNC 255A COM/NAV

GTX 335 Transponder ADS-B OUT

ELT 406 Mhz KANNAD

Antennas:

- Transponder
- VHF
- VOR
- Marker Beacon
- ELT

Speakers

Microphone

Stick Push-To-Talk Switch-Pilot/Copilot

Mic & Phone Jacks-Pilot/Copilot

AVIONIC OPTION 1 NIGHT VFR



NIGHT VFR VERSION

Includes the following equipment:

- Heated Pitot
- GILL 25A Battery
- Instrument Light
- Map Light
- Dimmer
- Aux Alternator

Non-Additive. Replaces all Standard Avionics

VARIABLE PITCH OPTION 1



P2002 JF VP CS/VLA

Includes the following equipment:

- Rotax 912 S3 100 hp Engine with Governor
- Central Quadrant with single throttle and pitch lever
- Hoffmann Variable Pitch Propeller
- Manifold Pressure Indicator
- Attitude and Directional Electric

Non-Additive. Replaces all Standard Avionics.

SPECIAL HAND CONTROLS

Special Hand Controls version

On March 27th, 2014, the P2002JF aeroplane was approved by EASA to incorporate full integrated hand control kits for disabled pilots. This makes the P2002JF the first worldwide factory-built VLA certified aircraft equipped with hand controls. This version of the Tecnam P2002JF aircraft architecture is very simple and flexible. Flight instruction will be allowed by a third throttle control and second slip indicator on the RH side, while whomever is seated on the left side (student or disabled pilot flying solo) will:

control the stick (pitch and roll) and the brakes with the left hand;

control the rudder, throttle and flap with the right hand on the central control.

No flight control operations other than the radio and altimeter settings, will need to separate the hands from controls making this solution safe and ergonomic.

In addition to the flight control modifications, several improvements have been made to make the access to disabled pilots easier: strengthened leading edges (both LH and RH), four additional grab handles to help step inside and outside the cabin and, finally, an increased canopy opening.



PAINT SCHEMES

Standard



St1.1__ Colour Stripes



521 INTENSE BLUE
546 SILVER
521 INTENSE BLUE

St1.2__ Colour Stripes



502 BLACK
546 SILVER
547 GOLD

St1.3__ Colour Stripes



519 MEDIUM RED
546 SILVER
502 BLACK



St2.1__ Colour Stripes



528 INTENSE BLUE
546 SILVER
519 RED

St2.2__ Colour Stripes



502 BLACK
547 GOLD
546 SILVER

St2.3__ Colour Stripes



519 RED
502 BLACK
546 SILVER

Special Paints



Sp1.1 __ Paints __ Stripes



LIGHT GRAY 502 BLACK
547 GOLD

Sp1.2 __ Paints __ Stripes



RED 528 VIVID BLUE
546 SILVER

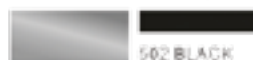
Sp1.3 __ Paints __ Stripes



NAVY BLUE 547 GOLD
546 SILVER



Sp2.1 __ Paints __ Stripes



LIGHT GRAY 502 BLACK

Sp2.2 __ Paints __ Stripes



RED 502 BLACK

Sp2.3 __ Paints __ Stripes



NAVY BLUE 546 SILVER

P2002JF OPTION LIST

AUDIO, RADIO & NAVIGATION EQUIPMENT

cod kg

GARMIN-COM/NAV/GPS

201	1,04	GARMIN GTR225A 10W COM 8.33 KHZ WITH ANTENNA AND INST.
202	1,38	GARMIN GTR225B 16W COM 8.33 Khz with Antenna and Inst.
203	1,57	MD200 VOR Indicator Only for GNC255A
204	3	GTN 650 Com/Nav/Gps with Antennas, Triplex and inst. With GI106A Ind.
205	3	GTN 650 Com/Nav/Gps with Antennas, Triplex. & inst. With GI106A Ind.(Exch. for Std. GNC255A)

GARMIN-TRASPONDER

206	1,45	GTX 345 TRANSPONDER MODE S ADS-B IN/OUT PANEL MOUNTED WITH GPS, ANTENNA TDX AND INST. (EXCH FOR STD GTX335)
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BENDIX KING

207	1,27	KR 87 ADF with KI227 Indicator
208	1,27	DME KN63 14 with KDI 572 Indicator

OTHERS

209	0,29	Power Flarm TRX1500- AT-1
210		Toe Brakes
211		Central Quadrant with single throttle lever
212		Coolant Operating Cabin Heating System (Exch. Std. Heating System)

EXTERIOR

213		CS-VLA Special Paint
216		Metallic Paint Upgrade - Requires Special Paint

ENGINE and PROPELLER EQUIPMENT

217		AUX. Alternator (Only P2002 and P92)
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OTHERS & ACCESSORIES

219		Clear-Com Headset, two
220		BOSE A20 Headset, two
221		Fuselage Cover
222		Controls Locker
223		Towing Bar
J F - pack		P2002JF Disassembling and Packing



1948 - 2018
70
YEARS

20020414

Pascale Museum at Tecnam Headquarters Capua

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