

# *P68 Observer Series*

## *The Aerial Works*

### *Industry Standard*



Vulcanair S.p.A.  
Via G. Pascoli, 7 - 80026 Casoria (NA) - Italy  
Tel: +39 0815918111 - Fax: +39 0815918172  
e-mail: [sales@vulcanair.com](mailto:sales@vulcanair.com) - [www.vulcanair.com](http://www.vulcanair.com)

vulcanair  
aircraft 

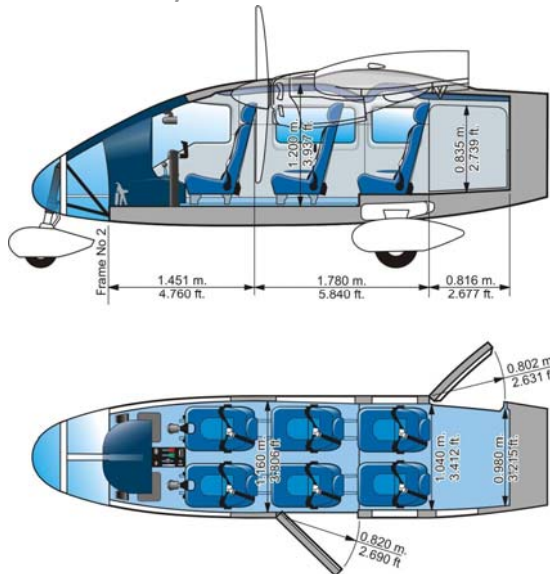
# P68 Observer Series (P68 Observer 2 – P68TC Observer)

“unique visibility, unsurpassed utility, extreme beauty”

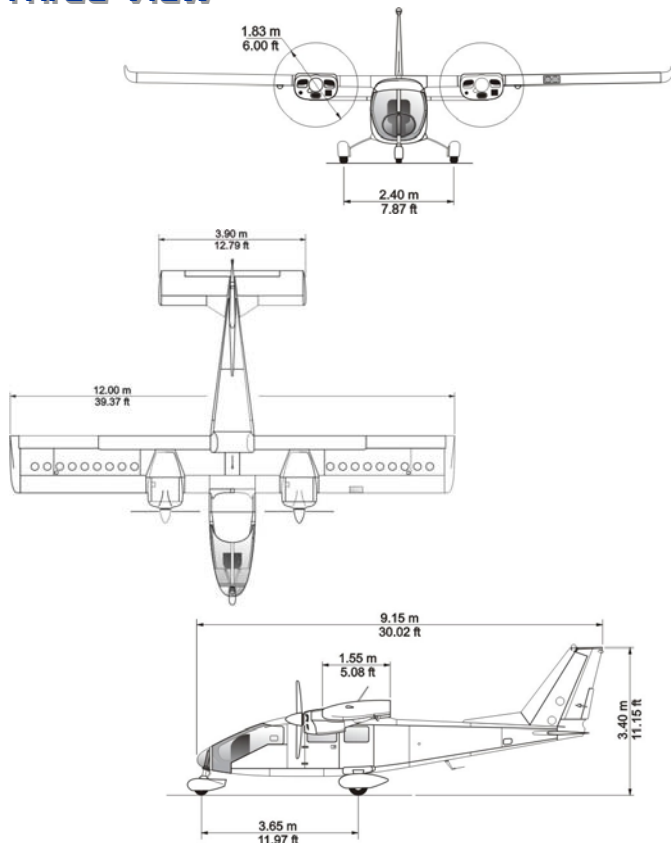
The **Vulcanair Aircraft P 68 Observer Series** is a six seater, twin engine, high wing, fixed landing gear airplane for observation, light transport or plain enjoyment of the panorama.

The main characteristic of the aircraft is its **helicopter-like visibility** thanks to its plexiglass transparent nose. This uncommon feature in fixed wing aircraft enables it to perform patrol and observation roles like a helicopter, yet with acquisition and operating costs much lower than those of a helicopter and with a much higher endurance (**11.5 hr**). Extreme structural simplicity, absence of complicated systems, ruggedness, accessibility to servicing points reduce maintenance costs and put the Observer in a position of outstanding advantage with respect to helicopters whenever vertical take-off is not necessary. The new generation glass cockpit further reduces the cockpit size increasing visibility and further increases the situational awareness of the pilot.

## General Layout



## Three View



## NEW Cockpit Layout – P68 Observer 2



## Aircraft Configuration

The standard interior configuration is for 6 people (1+5). The large cabin volume is available for carriage or installation of bulky items like airborne surveillance racks, aero-photo cameras, stretchers for ambulance duties, etc. while still leaving some space for the operators. Most importantly, the aircraft features a standard predisposition for a 2.1 x 1.5 ft. belly hatch (63 x 46 cm.) allowing the safe installation of several cameras and airborne surveillance equipment. The legendary and extremely stable flight characteristics make the Observer a very flexible and easily customisable platform for aerial photography, reconnaissance and emergency missions.

## Dimensions

CABIN	COCKPIT AREA		PASSENGER CABIN	
Cabin length	1.451 m	4.760 ft	1.780 m	5.840 ft
Cabin width	1.160 m	3.806 ft	1.160 m	3.806 ft
Ave. Cabin height	1.150 m	3.773 ft	1.200 m	3.937 ft
Total Volume			2.478 m <sup>3</sup>	87.51 cu. ft
CARGO COMPART.	PAX CONF.		CARGO CONF.	
Length	0.816 m	2.677 ft	2.596 m	8.507 ft
Ave. width	1.010 m	3.300 ft	1.100 m	3.609 ft
Ave. height	1.000 m	3.281 ft	1.120 m	3.674 ft
Total Volume	0.824 m <sup>3</sup> 28.98cu.ft		3.198 m <sup>3</sup>	112.8 cu. ft

## Performances

Max Ramp Weight	2100 kg	4630 lb
Max Take-Off Weight	2084 kg	4594 lb
Std. Empty Weight (std equipped w/avg opt.)	1420 kg	3130 lb
Max Useful Load	680 kg	1499 lb
Max Usable Fuel	670 lt	177 US gal
Number of Seats	6	6
Luggage Capacity in Luggage Compartment	0,56 cu.m	20 cu.ft
Max Luggage Weight	181 kg	400 lb

### P68 Observer 2 – Engines Lycoming IO-360-A1B6 200 hp

Cruise Speed @ 75%, ISA, FL 80	301 km/h	160 ktas
Best Econ. Cruise Speed @ 60%, FL90	277 km/h	150 ktas
Rate of Climb (2 engines SL, MTOW)	6 m/s	1100 fpm
Stall Speed, 35 deg. flaps, MTOW	106 km/h	57 kcas
Max Altitude	5490 m	18000 ft
Max Range 4 persons (77 kg):	1950 km	1053 nm
Std Tanks, Cruise 50%, PWR @ 10000, 45' res		
Take-Off Run	240 m	787 ft
Take-off over 50 ft obstacle	400 m	1312 ft
Landing Run	200 m	656 ft
Landing over 50 ft obstacle	600 m	1969 ft
Max Endurance 4 persons (77 kg):	7,6 h	7,6 h
Std Tanks, Cruise 65 %, PWR@10000, No Res		

### P68TC Observer-Engines Lycoming TIO-360-C1A6D 210 hp

Cruise Speed @ 75%, ISA, FL 80	334 km/h	180 ktas
Best Econ. Cruise Speed @ 60%, FL90	283 km/h	153 ktas
Rate of Climb (2 engines SL, MTOW)	7.6 m/s	1500 fpm
Stall Speed, 35 deg. flaps, MTOW	106 km/h	57 kcas
Max Altitude	6100 m	20000 ft
Max Range 4 persons (77 kg):	1950 km	1053 nm
Std Tanks, Cruise 50%, PWR @ 10000, 45' res		
Take-Off Run	230 m	755 ft
Take-off over 50 ft obstacle	384 m	1260 ft
Landing Run	200 m	656 ft
Landing over 50 ft obstacle	600 m	1969 ft
Max Endurance 4 persons (77 kg):	7 h	7 h
Std Tanks, Cruise 65 %, PWR@10000, No Res		