

### Enabling drones to populate our skies

# VBN 1.0 AUTOPILOTS

# VISUAL BASED NAVIGATION FOR UAV & EVTOL

Integrated visual navigation equipment for DAA and GNSS denied navigation.

Developed in compliance with DO178-C, DO254 and DO160-G aviation standards for UAV and eVTOL certification.

## **ADVANCED NAVIGATION SYSTEM**



Stereoscopic computer vision for obstacle detection & characterization



GNSS DENIED NAVIGATION

SLAM processing for position triangulation in GNSS denied environments



UAM CERTIFICATION

Deterministic technologies and compliance with DO178C and DO254



#### **MAIN FEATURES**

Positioning & attitude
Obstacle detection and identification
Dual camera for advanced performance
Embedded camera
DAA or GNSS denied modules
Designed to meet aircraft certification

#### DETECT AND AVOID

Obstacle	Detection & recognition
Recognition	IA technology
Output	Size   Speed   Direction   Position   Identification
Postion	Relative or absolute
IFF	Identification Friend or Foe
Target	Moving or static object follow

#### **GNSS DENIED NAVIGATION**

Position	Absolute positioning
Altitude	AGL estimation
Attitude	Yaw, pitch & roll
Technology	SLAM
Maps	Not required

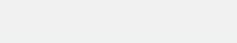
#### **SAFETY & CERTIFICATION**

Software	D0178C
Hardware	D0254
Environmental	DO160
DAA	DO365B
Protections	ESD, overtemperature, short circuit, RP
Robust Manuf.	ATR, DDP & DoD   ESS

#### GENERAL

I/O	CAN Bus   RS232   RS485
Conector	Circular rugged
Power Input	6.5 - 36VDC   10W   Redundant power input
Construction	Anodized aluminum   IP67
Temperature	-40 to 60°C
Weight	110g





[P005345] Veronte Autopilots: VBN 1.0 \*Draft datasheet. Specifications may vary.





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