Forward Looking Sonar Comparison Sheet

EchoPilot – Forward Looking Sonar Product Comparison

Category	FLS 3D	FLS 3D – 30 Degree	Garmin Panoptix 51-TH	Navico Forward Scan
System Configuration	Dual transducers (Port + Starboard)	Single transducer system	Single transducer system	Single transducer system
Horizontal Beam Width	60° (dual 30° each)	30° (single transducer)	20° (single transducer)	Unknown
Vertical Beam	90°	90°	Unknown	Unknown
Maximum Forward Range	200 m	200 m	90 m	90 m
Maximum Depth Detection	100 m	100 m	90 m	90 m
Bottom Mapping Range	Up to 20× water depth	Up to 20× water depth	Up to 8x water depth	Up to 4x water depth
Operating Frequency	200 kHz	200 kHz	417 kHz	180 kHz
Operating Speed (max)	Up to 20 knots	Up to 10 knots	Unknown	Unknown
Power Requirement	12/24 V DC, ~20 W	12/24 V DC, ~20 W	Unknown	Unknown
Output Power	28 W	28 W	96 W	Unknown
Angular Accuracy	±1.5°	±1.5°	Unknown	Unknown

Display Output Options	HDMI / VGA	HDMI / VGA	Works only with Garmin MFD	Works only with Navico MFD
Raymarine Integration	Direct Axiom integration via RJ45–RayNet	Direct Axiom integration via RJ45–RayNet	No	No
Transducer Type	Two through-hull transducers	Single through-hull transducers	Single through-hull transducers	Single through-hull transducers
Hull Fitting Material	Bronze / Aluminium / Steel	Bronze (std.), Steel or Aluminium (opt.)	Bronze	Bronze
Control Options	Keypad or On/Off Button	Keypad or On/Off Button	N/A	N/A
Average Forward Depth (AFD)	Included	Included	Not Included	Not Included
Display Compatibility	Any HDMI/VGA or Raymarine Axiom display	Any HDMI/VGA or Raymarine Axiom display	Only on Garmin MFD	Only on Navico MFD
Ideal Vessel Size	50 – 120 ft	29 – 60 ft		