

SYSTEMS: PERFORMANCE COMPARISON

	SHIP SYSTEM	LASER FIXED	LASER PORTABLE	GYROPILOT*	CHANNELPILOT* DGPS	HARBOURPILOT* DGPS	HARBOURPILOT* RTK
POSITION	±5m?	Not measured	Not measured	AIS	±1m	±30cm	±1cm
HEADING	1° ±0.5° (subject to Gyro error)	Not measured	Not measured	0.01°	0.1° ±0.01	0.02° ±0.01	0.02° ±0.01
RATE OF TURN	1°/min (normally not available from AIS)	Not measured	Not measured	<0.5°/min	0.4°/min	<0.5°/min	<0.5°/min
SPEED OVER GROUND	10 cm/s 0.2 knot	1 cm/s 0.02 knot	1 cm/s 0.02 knot	Ship	4 cm/s 0.1 knot	2 cm/s 0.05 knot	1 cm/s 0.02 knot
DISTANCE OFF BERTH	Not measured	300m ±1cm	200m ±1cm	Unlimited	Unlimited ±1m	Unlimited ±30cm	Unlimited ±1cm
DISPLAY	ECDIS	Jetty display Control room	Local laptop	Laptop/tablet Optional remote	Laptop/tablet Optional remote	Laptop/tablet Optional remote	Laptop/tablet Optional remote
OPERATING TIME	Always on	On demand	10 hours	>30 hours	>15 hours	>15 hours	>15 hours
SET-UP TIME	Not applicable	5 mins	20 mins	2 mins (from arrival on bridge)	2-3 mins (from arrival on bridge)	2-3 mins (from arrival on bridge)	2-3 mins (from arrival on bridge)
OPERATION (appropriate correction avail)	Anywhere	Dedicated berth	Anywhere	Anywhere	Anywhere	Anywhere	Anywhere
AIS RECEIVER	Yes	No	No	No	Yes	Yes	Yes
REPLAY FACILITY	Via VTS logs or black box (if fitted)	Depends on software	Depends on software	Depends on ECDIS	Depends on ECDIS	Depends on ECDIS	Depends on ECDIS
WEIGHT (excluding display)	N/A	N/A	30kg++	300g	850g	3kg min (depends on spec)	3kg min (depends on spec)