

Tidewell Brain Kit

Tidewell Brain on a robot you already own, with the vendor's telemetry removed.

What it does

- Retrofit to EDU-class Unitree and AgiBot bodies (Both)
- Join an existing body to a Tidewell Crew (Both)
- Replace vendor provisioning, telemetry and update path (Both)
- Add an independent safety controller and secure site comms (Both)

Specifications

SPECIFICATION	DESIGN TARGET	MEASURED
Compute module	NVIDIA Jetson Thor T5000 or T4000, sealed backpack housing	—
Safety controller	Independent dual-channel supervisory controller, e-stop, geofence, speed and separation	—
Site communications	Private 5G or Wi-Fi 6E, wired safety channel where the site allows	—
Firmware	Signed, per-unit keys, customer-held signing keys	—
Provisioning	No Bluetooth provisioning, no unsolicited telemetry	—
Vendor network	Isolated at the kit, vendor cloud unreachable from the body	—
Kit mass	3.5 kg backpack plus 0.8 kg controller	—
Power draw	40 to 70 W from the body's pack	—
Installation	One working day per body, no body firmware changes	—
Measured values are added as each test completes and carry the test date.		

Safety and certification status

IEC 61508 · Independent supervisory safety controller for retrofitted bodies; the body itself is not certified · in-design

IMDA equipment registration · Radio equipment in the secure comms module for use in Singapore · not-started

Deployment model

Kit purchase · Brain licence per robot

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