

ORB, the Open Radio Basestation

One trailer-mounted box that covers a whole jobsite with no license, no carrier, and no site survey. A superintendent brings it up in a morning.

Platform at a glance

Architecture	Seven-radio platform: TVWS, Wi-Fi HaLow, CBRS, NR+, Wi-Fi 7, 6 GHz backhaul, and satellite/LTE WAN
Aggregate capacity	Up to 4 Gbps across the radio set, steered per policy class
Reach	10+ km on the low bands, with the trailer, site, and tail coverage zones addressed separately
Edge compute	Class A and Class B compute on the unit for local video, inference, and site services
Coordination	PAWS, SAS, and AFC grants requested automatically; nothing filed by the customer
Safety tier	NR+ deterministic mesh in reserved 1.9 GHz spectrum, isolated from site traffic

Why it works without specialists

Every band is unlicensed or database-coordinated, so the channel arrives as a grant instead of a permit. Policy lives in the coordination layer rather than in the box, which means a swapped unit needs no configuration.

Coverage is engineered as three zones rather than one radius: the trailer cluster, the working site, and the tail of the haul road or corridor. Machines, cameras, tablets, and radios all ride the same coordinated plan.

What ships and what the site provides

In the crate	ORB unit, telescoping mast, mounting hardware, cabling, and the quick-start card
Site provides	Power, a view of the sky, and somewhere to park the trailer
Setup time	Under an hour from parking to driving the site with coverage
Commercial paths	Site-month rental, fleet purchase, or a paid pilot on one live job

Specification suite v0.9, draft for partner review. Hardware in pilot allocation. Stage a pilot or request the full specifications at project--a6d02ee2-fe33-4959-a96d-dd4c3d9d55dc@lovable.app/contact