

Catfish OS Specification Sheet

Catfish OS · Industrial Robotics Software



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Modules	CAD formats	Fleet states	Plant protocols

MODULES

Modules	Studio, Control X, Weld, Mission Control, Fleet, Twin, Proof, Connect
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MOTION

Robot control integration	Supported
External-axis coordination	Supported
Multi-robot coordination	Supported

PROGRAMMING

CAD import	STEP, IGES, Parasolid
Programming	No-code, AI-assisted, Python API
Digital twin	Supported
Offline programming	Supported
Robot simulation	Supported
Reach analysis	Supported
Collision analysis	Supported
Weld-path programming	Supported

PROCESS

WPS library	Supported
Process parameter management	Supported
Quality records	Supported
Manufacturing traceability	Supported

OPERATIONS

Job scheduling	Supported
Production monitoring	Supported

Specifications are engineering targets for current Catfish systems and are confirmed per installation at acceptance.

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Generated 2026-10-19 · Page 1

Fleet monitoring	Supported
Maintenance monitoring	Supported
Manufacturing analytics	Supported
User/role management	Supported
Fleet states	Running, Idle, Waiting for material, Waiting for human, Quality hold, Maintenance required, Fault, Offline
Scheduler inputs	Due dates, dependencies, WPS, robot capability, machine health, material, labor, positioners, inspection, crane and floor space

CONNECTIVITY

Robot connectivity	Catfish W7 native; ABB, FANUC, KUKA, Yaskawa, Universal Robots and Estun through Connect, configured per site.
Protocols	OPC UA, PROFINET, EtherNet/IP, EtherCAT, MQTT
Developer	REST/gRPC API, Python SDK, ROS 2 bridge
ERP/MES/PLM integration	Architecture supported
Third-party equipment integration	Architecture supported

SAFETY

Safety architecture	AI plans, deterministic control moves, an independent safety layer stops
Servo authority	No AI model commands servo output directly