

Nitraskid-IQ™

PRODUCT INFORMATION

Nitraskid-IQ™ is a pump skid fully integrated with EOSi's Virtual Nitrack® technology to streamline, enhance and optimize biological nutrient removal.

BENEFITS

- ▶ Fully automated carbon dosing that can be monitored from end to end
- ▶ Backed by Nitrack® precision technology to optimize MicroC® performance while reducing chemical costs and operator oversight
- ▶ Access to Virtual Nitrack® HMI dashboards, trends and alarms to manage process control
- ▶ Quick and easy install/startup with wireless communication
- ▶ Flexible placement and deployment anywhere

FEATURES

- ▶ Custom built two or three pump skid, pre-plumbed and pre-wired, in a weather resistant shippable package
- ▶ Redundant pumps and cross tie valve
- ▶ Calibration column
- ▶ Electrical safety built-in by design
- ▶ Fork-lift and hand truck compatible

SCOPE OF WORK

- ▶ EOSi provides all labor, material, equipment, and services necessary for furnishing, fabricating and delivering the Virtual Nitrack® Control System, integrated into the Nitraskid-IQ™

CONTROL OPTIONS

- ▶ Terminals provided for direct Field Wiring to your PLC
- ▶ Wireless cloud-based control (Virtual Nitrack®)
- ▶ Local connection to your PLC ethernet network (with or without cloud connection)
- ▶ Options can be equipped with air-gapped protection but allowing read-only access for historical trends on your PC, phone or tablet
- ▶ Direct connection to a local Nitrack® control system

FIELD CONNECTIONS

- ▶ Power (120VAC)
- ▶ Pump Run Command
- ▶ Speed Reference (4-20Ma, or 0-10V)
- ▶ Pump Running output (dry contact)
- ▶ Pump Fault output (dry contact)
- ▶ Optional:
 - Pump speed feedback (4-20Ma)
 - Flow sensor feedback
 - (2) programmable outputs e.g. specific faults – Overcurrent, etc (dry contact)

ENGINEERING SUPPORT

- ▶ Ongoing assessment of process performance
- ▶ Available for pilot trials, scalable for long term

TECHNICAL SPECIFICATIONS

Skid Construction	▶ 50" x 25" marine-grade UHMW skid
Pump Configuration	▶ Dual peristaltic dosing pumps
Flow Capacity	▶ 33 to 160 GPH
Chemical Connections	▶ 1" inlet, 0.5" discharge
Power Requirements	▶ 120 VAC
Flow Verification	▶ Electromagnetic flow meters with local indication
Piping Materials	▶ Schedule 80 PVC piping and fittings
Calibration	▶ Integrated calibration column for pump-to-dose alignment
Integrated Controls	▶ Designed for integration with the Nitrack® automated dosing control
Placement Flexibility	▶ Wireless communications allow flexible skid place with only power required



(a)



(b)



(c)



(d)

- (a) – Skid Overview, Front
- (b) – Calibration Column
- (c) – Zoomed In Pumps, Front
- (d) – Communication Hardware