FIELD-GRADE IOT CONTROLLER

Neo Field

Ruggedized IoT hardware for demanding outdoor environments. Built-in LCD, touch keypad, and IP65-rated enclosure for agriculture, water management, and remote infrastructure.

2	4+	IP65
Hardware Variants	Protocol Interfaces	Rated Enclosure

Seamlessly integrated with CORE cloud-native IoT platform

Revision 2.0 | 2026 | Datasheet



Overview

The Neo Field is a ruggedized, field-grade IoT controller engineered for demanding outdoor deployments. With an integrated LCD display, touch keypad, and IP65-rated industrial enclosure, it delivers reliable edge computing and universal connectivity in mining , agriculture, irrigation, water management, utilities, and remote infrastructure monitoring. Built on the same modular architecture as the Neo ONE, it integrates natively with the CORE platform for real-time control, automation, and enterprise-grade security.

Key Features

Ruggedized Design

IP65-rated enclosure withstands dust, rain, and temperature extremes from -20°C to +60°C. UV-stabilized outdoor exposure.

Integrated HMI

Built-in LCD display with touch keypad enables on-device configuration, status monitoring, and local control without a connected PC or smartphone.

Universal Connectivity

Native Modbus RTU, 4-20 mA, SDI-12, digital I/O, and serial interfaces. Seamless integration with flow meters, pumps, VSDs, and legacy field devices.

Technical Specifications

Specification	Details
PROGRAMMING **Lua scripting with AI-assisted development**	**On-device runtime with OTA updates, OTA Programming via ESECore portal**
DISPLAY **Integrated LCD + touch keypad**	**128x64 monochrome LCD, capacitive touch keypad, transflective lcd for easy daylight reading.**

Specification	Details
CONNECTIVITY **LTE Cat-1m, NB-IoT, LoRaWAN, Corelink, Wi-Fi**	**802.11 b/g/n, cellular multi-band**
GPS **Integrated GPS/GNSS positioning**	**Multi-constellation: GPS, RTK**
POWER OPTIONS **Internal 7000mAh Li-Ion, Solar, External DC**	**Solar, external 5-24V DC input, battery life 7+ days ***
I/O **4x Analogue, 2x Digital In, 4x Digital Out**	**Analogue: 0-10V / 4-20mA configurable. Digital: 0 -24V logic pulse counters, 0-24V High speed transistorized output.**
COMMUNICATIONS **RS485 Modbus RTU, SDI-12, Wiegand, BLE**	**Isolated RS485 - Modbus – Genibus , SDI-12 v1.4 for environmental sensors, Wiegand 26/34, Bluetooth 4.2 BLE**
ENCLOSURE **Weatherproof IP65 industrial housing**	**IP65 rated, casted aluminium enclosure, -20°C to +70°C operating range**
PLATFORM **CORE Cloud-native IoT platform**	**Real-time dashboards, device shadows, serverless functions, TLS 1.3 encryption, real-time notification and historian.**

Hardware Variants

Variant	Description
Neo Field V2	Field controller
Neo Field - Trace	Field controller with integrated high accuracy RTK GPS

Certifications & Compliance

Standard	Description
CISPR 32:2015 Class B	Electromagnetic compatibility (Emissions)
IEC 61000-4-2	Electrostatic discharge immunity
IP65 Rated Enclosure	Dust-tight and protected against water jets

POWERED BY ESECORE PLATFORM

