

OMNIR NEAR INFRARED MOISTURE SENSOR | VERSION COMPARISON

OMNIR V1 **vs.** OMNIR V3

Feature/Spec	OMNIR V1	OMNIR V3
HMI ENHANCEMENTS		
HMI Display	4-line LCD with buttons	7" color touchscreen
Analog Outputs (4–20 mA)	2 channels	4 user-configurable channels. Assign MC%, temperature or another measurement to each.
PLC Integration	Optional protocols (EtherNet/IP, PROFINET, Modbus TCP, Modbus); sends moisture and temperature	All V1 capabilities, plus expanded PLC data including active product code, product runtime, sensor status, process alarms, measurement status and scaled sensor values
Product Code Switching from PLC	No	Yes (PLC integration purchase required)
HMI Hardware	—	New motherboard with more I/O for future expansion
SENSOR ENHANCEMENTS		
External Trigger	Control when the sensor measures, using a photo-eye or PLC output. Dedicated terminal block in the HMI cabinet.	Control when the sensor measures, using a photo-eye or PLC output. Dedicated terminal block in the HMI cabinet.
Max Cable Length	66 ft (20 m)	328 ft (100 m), with no signal loss over longer runs
APP ENHANCEMENTS		
Controller Communication	—	Faster response and fewer dropped packets, especially over Wi-Fi
Multi-Unit Saved Connections	—	Saved connections for quick switching between units
Software Installation	Windows application with SQL Server database	Simplified install with a lightweight SQLite database. SQL Server stays optional for centralized reporting.
Calibration Model	Look-up table	Look-up table and linear model that works like other common NIR meters, so switching to Finna is easier
SPC Charts	SPC charts in reports	Choose what to plot: M1 and M2 (raw or scaled), LOP and temperature
Licensing Options	None	PLC protocol, calibration development/support (not yet available)
ACCESSORIES		
Available Accessories	SAME FOR BOTH VERSIONS 7" operator display, dust shield, opto port, cables, connectors, sapphire lens (for food products)	