WCS-9

Substrate Sensor Set (VWC, EC & Temp)



The TrolMaster WCS-9 Substrate Sensor is a 3-in-1 device designed for the Aqua-X, Hydro-X, Tent-X, and Green-X Control Systems (NFS-1, NFS-2, NFS-3, HCS-2, TCS-1, GCS-1). Represents the pinnacle of the WCS series, engineered to deliver unparalleled precision in monitoring both traditional soil and high-bulk EC soilless substrates. Recognizing the inherent limitations of single-sensor monitoring—which can frequently misrepresent the root zone due to localized anomalies like "hot spots" or water channeling—the WCS-9 introduces an advanced, completely redesigned internal multi-node architecture.

This innovative framework permits the daisy-chaining of up to four individual Sensor Nodes directly into a single Sensor Display. By aggregating data across multiple points in the growing medium, the system calculates and provides a highly accurate and trustworthy average of the root zone's Volumetric Water Content (VWC), Electrical Conductivity (EC), and Temperature.

By providing hyper-accurate, verified root zone data, the WCS-9 serves as the crucial mechanism for TrolMaster's advanced "Feed on Demand" irrigation strategy. This sensor-based control replaces traditional timer-based guessing by utilizing real-time moisture parameters to automatically trigger irrigation events, allowing cultivators to execute precise dry-backs and sophisticated crop steering strategies effortlessly.

Users can monitor the water content, temperature, and EC on their smartphone using TrolMaster's free TM+ Pro App. The app also allows viewing historical data graphs and receiving notifications if sensor readings exceed customised high or low alarm settings.

Specifications

WCS-9

Input Voltage

Input Voltage	12V ⎓ 0.1A

Sensor Display Capacity

Aqua-X (NFS-1)	Up to 1
Aqua-X Pro (NFS-2)	Up to 50
Aqua-X Plus (NFS-3)	Up to 20
Hydro-X Pro (HCS-2)	Up to 50
Tent-X (TCS-1)	Up to 1
Green-X (GCS-1)	Up to 1
Sensor Nodes per Display	Up to 4

Package Dimensions

Size	5.43inch / 138mm(L) x 6.69inch / 170mm(W) x 2.52inch / 64mm(H)
Gross Weight	1.39lbs / 0.63kg

Package Contents

WCS-9 Sensor Display	1pc
WN-9 Sensor Node (Additional nodes sold separately)	1pc
16ft RJ12 Cable Set	1pc
T-Splitter	1pc

Measurement Range

Water Content (VWC)	0~100%
Electrical Conductivity (EC)	0-30 mS/cm
Normal Measurement Interval	Every 1 min
"Feed on Demand" Interval	Every 10 sec

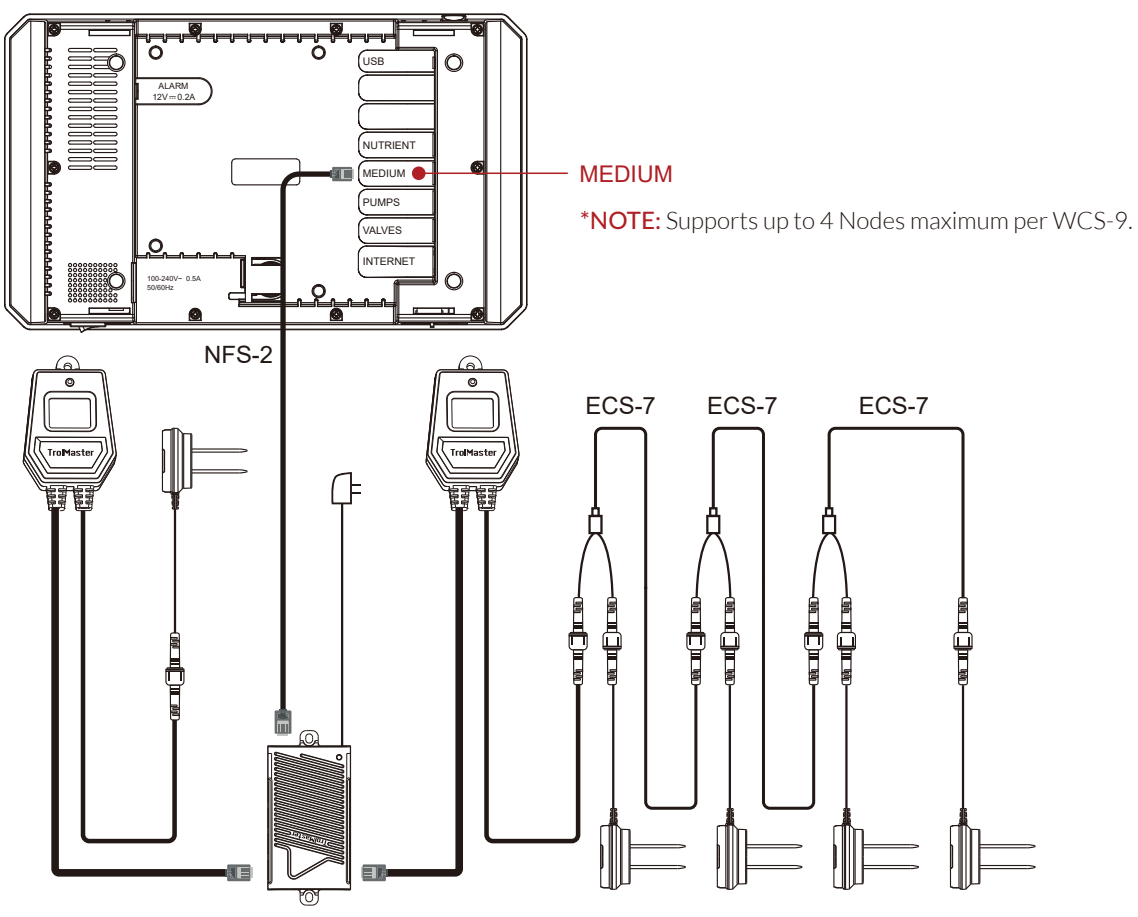
Operating Environments

Temperature	32~122°F (0~50°C)
Humidity	≤90%RH

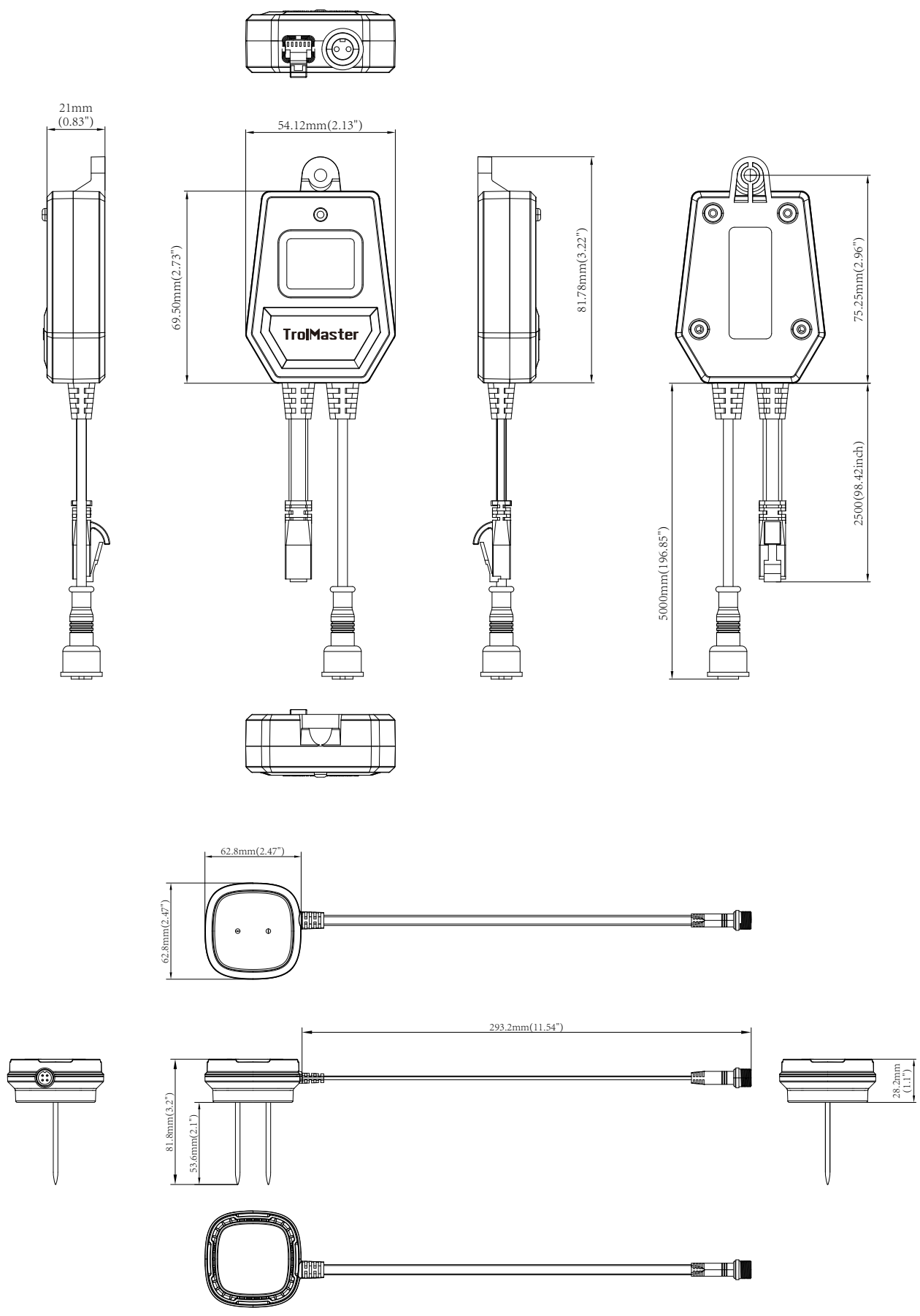
Link Up

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Connection Diagram



Product Dimensions



FC RoHS

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For more details and to access full information, please click or scan the QR code above.

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