

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+ 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

Maximum Ratings

Input Voltage	12V \pm 0.1A
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Storage Temperature

Temperature	0~140°F (-17.8~60°C)
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Water Content (WC)

Range	0~100%
Resolution	1 %
Accuracy	-5 - +5 %

Electrical Conductivity (EC)

Range	0~30 mS/cm
Resolution	0.01 mS/cm
Accuracy	\pm 10%+0.2 mS/cm

Measurement Range And Accuracy

Range	32~122°F
Resolution	0.1°F
Accuracy	\pm 1°F

Package Contents

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

Package Dimensions

Size	10.83inch / 275mm(L) x 6.46inch / 164mm(W) x 2.55inch / 65mm(H)
Gross Weight	1.65lbs / 0.75kg

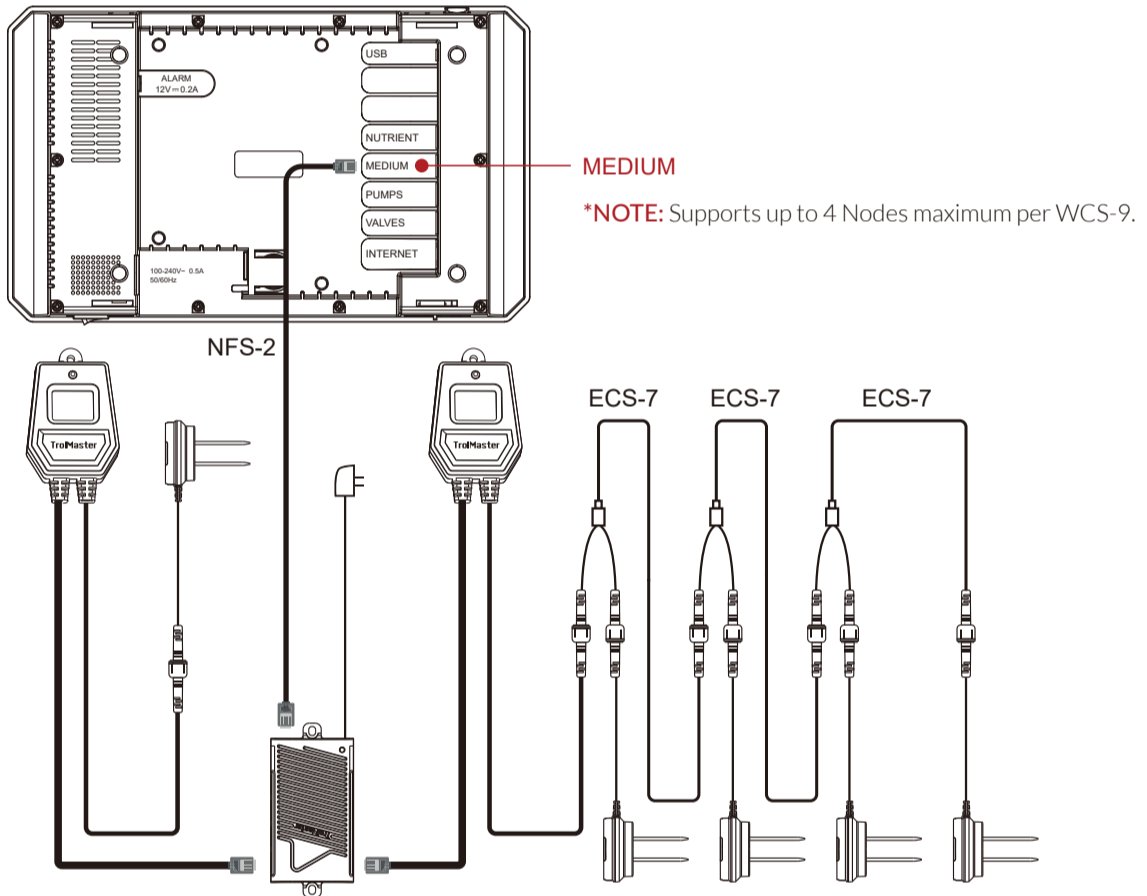
Operating Environments

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

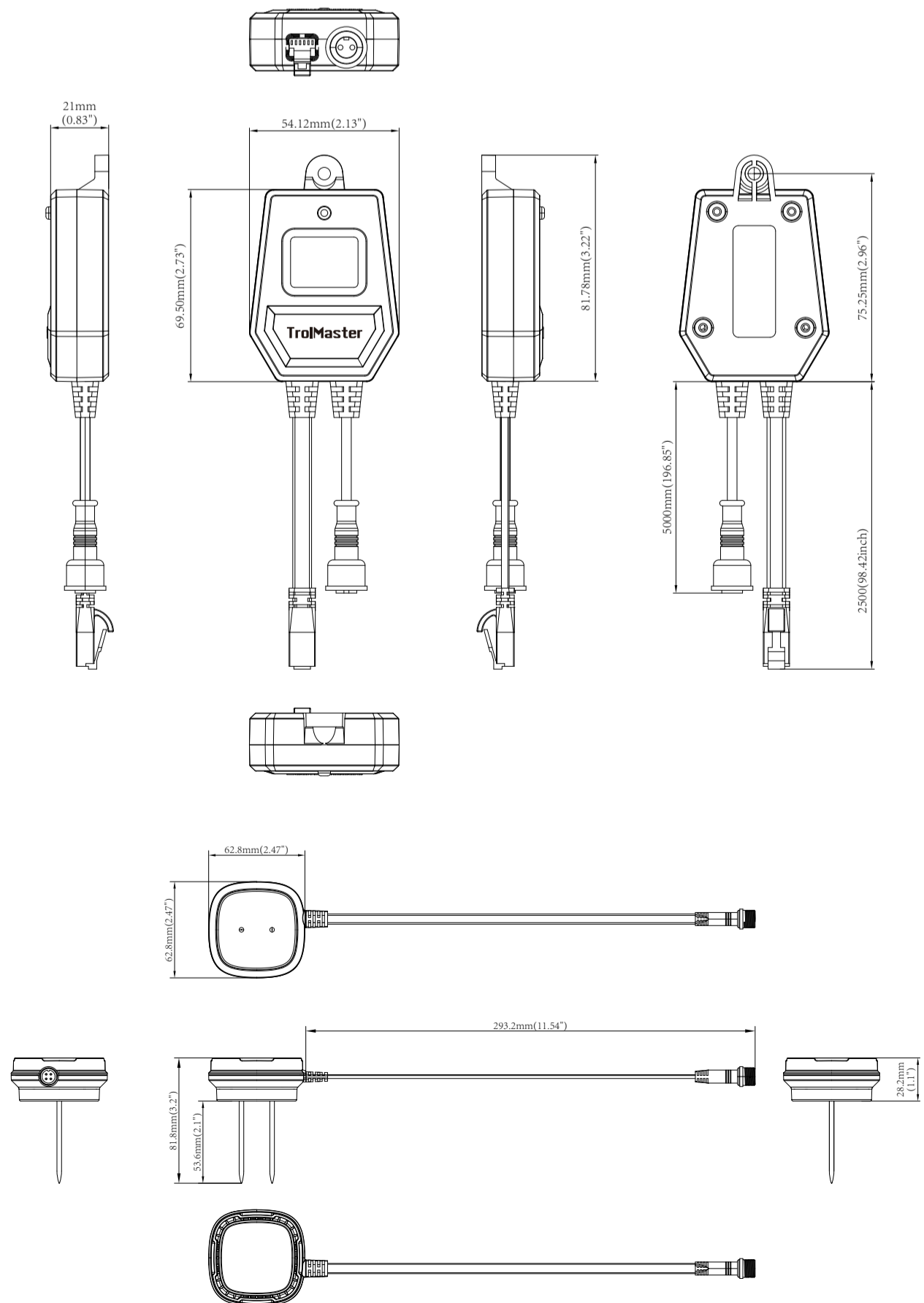
Link Up

WCS-9

Connection Diagram



Product Dimensions



RoHS