C2/TX Wireless Site Manager

Multi-Channel Wireless Display & Alarm Controller for Critical Gas Monitoring Applications

* Monitor up to 32 GASMAX TX toxic or combustible gas detectors

* Large LCD display shows values, alarm status and setup information

* 900 MHz or 2.4 GHz FHSS radios for long distance communications

* Channel info uploaded from GASMAX TX simplifi

* Eight standard programmable relays for alarm, fault, low batt

* Operates on either +24VDC or 117/240VAC 50/60Hz

* Optional RS-232 or RS-485 serial MODBUS® slave port

* Optional data logging with USB interface for easy data transfer

* Optional 802.11b/g WiFi web server for smartphone access

* Optional satellite / cellular remote access modem with antenna

* Non-metallic, painted steel and stainless steel enclosures

* Alarm Ack button doubles as "Push to Test" for relays

* Touch and magnetic keys for non-intrusive operation in XP areas

* 900 MHz transmitter power adjustable from 10mW to 1 watt

* MODBUS port for easy interface from DCS or MODBUS master

* Manufactured in USA

The new C2/TX Wireless Site Manager is the heart of third-generation wireless systems from GDS Corp. Designed to monitor from 1 to 32 wireless GASMAX TX gas detectors, the C2/TX incorporates the latest features while retaining the reliability and cost effectiveness of previous generation products.

The C2/TX WSM and GASMAX TX gas monitor have been designed from the ground up to deliver the best wireless solution for toxic and combustible gas detection available. Designed specifically for use with the new GASMAX TX gas monitor, the C2/TX controller features a high resolution LCD display and eight relays that can be programmed to signal multiple alarm levels, sensor fault, communications fault or low battery.

Digitally Connected, Wireless Enabled
Unlike mesh networks and other systems designed for short range applications, the C2/TX utilizes Frequency-Hopping Spread Spectrum (FHSS) modems that offer higher power, longer range and lower susceptibility to interference. An optional multi-interface board supports an RS-232 or RS-485 wired serial port for remote MODBUS access, a solid-state data logger with USB interface, a second 900 MHz or 2.4 GHz radio for dedicated wireless remote access as well as an 802.11 WiFi interface for access via smartphones or tablets. WiFi-enabled C2/TX controllers also feature an integrated web server that allows users to remotely view real-time data, historical information and current confi
password, remote users can change system setup variables. Finally, an optional satellite / cellular modem enables remote access from anywhere in North America.

Available in NEMA 4X non-metallic, painted or stainless steel and NEMA 7 explosion proof wall mount

Simplifi
Unlike previous generation products that required both the controller and gas detector be individually confi
type, engineering units, range and other parameters, the C2/TX automatically uploads the setup information from each GASMAX TX gas monitor. This reduces the possibility of errors and simplifi initial setup.

Reliability
The C2/TX controller is designed for use in Class I Division 2 hazardous areas. An optional NEMA 7 enclosure allows use in Class I Div 1 areas. Up to 12 watts of 24 VDC power is available for auxiliary devices or transmitters. In addition, an auxiliary 50 watt DC supply is available.

Toxic & Combustible Gas Detection • Controllers • Process Monitors • Calibration Supplies

C2/TX Specifications

Power Input	24VDC (12 Watt MAX) 85-240 VAC power supply included; up to 12W available for powering remote or local sensors Optional 50W supply available for local lights, horns or other anciliary devices
Display	Backlit 128x64 pixel LCD display
Input	Wireless 900 MHz or 2.4 GHz transmissions from up to 32 single channel GASMAX TX monitors or 16 dual channel GASMAX TX gas monitors
Relay Output	Eight programmable output relays (SPDT 5A @ 30VDC / 240VAC resistive load)
Digital Output	Optional RS-232 or RS-485 wired MODBUS port Optional WiFi 802.11 b/g wireless interface with built-in web server Optional second 900 MHz or 2.4 GHz wireless modem for dedicated remote communciations Optional data logging with USB interface
Audible Output	Optional local piezo / horn (see option "C")
Visual Output	Optional local strobe (see option "D")
Temp	-25°C to +50°C operating
Housing	Available in non-metallic, painted steel and stainless steel enclosure; also available in NEMA 7 explosion proof enclosure. Sunshade recommended if unit is to be installed in direct sunlight or areas where temperature extremes may be expected.
Dimensions	NEMA 4X Non-metallic: 11.25" x 13.31" x 7.25" NEMA 4X Painted or stainless: 9.84" x 13.65" x 6.2" NEMA 7: Width 13" x 14.25" x 6.25"
Approvals	Approvals pending
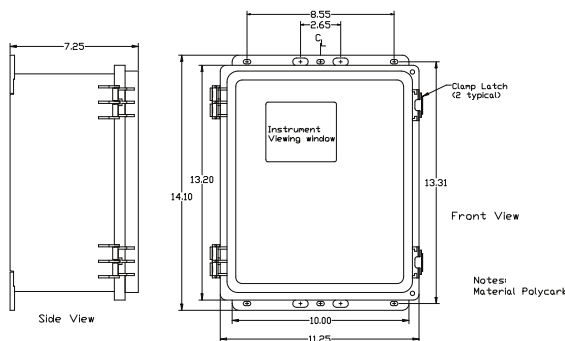
Determining Wireless Communications Range

The distance at which any wireless connection will operate is dependent on many factors, including terrain, frequency, path length, interference from existing radio sources, combined antenna height, transmitter power and receiver sensitivity. For reliable communication, the system power margin (TX power + RX gain + Antenna gain - Path Loss) must exceed 20 dB. Range can be improved by increasing antenna height, using directional antennas or increasing transmitter power.

C2/TX Order Guide

C2/TX A-B/C-D/E-F [900][2400][TAG][XBN][GBN]

A	ANTENNA 1 = Standard local omnidirectional antenna 2 = Flexible local omnidirectional antenna 3 = Remote omnidirectional antenna + 10' cable 4 = Remote directional antenna + 10' cable 5 = Remote omnidirectional cable + 20' cable 6 = Remote directional antenna + 20' cable
B	DIGITAL I/O[1] 1 = Eight local SPDT alarm relays 2 = Relays / data logging / MODBUS port 3 = Relays / logging / MODBUS / 900 Mhz radio 4 = Relays / logging / MODBUS / 2.4 Ghz radio 5 = Relays / logging / MODBUS / WiFi Interface 6 = Relays / logging / MB / WiFi / 900 Mhz radio 7 = Relays / logging / MB / WiFi / 2.4 Ghz radio
C	AUDIBLE ALARMS 0 = None 1 = 100 dB piezo buzzer 2 = 110 dB external horn (not rated) 3 = 110 dB external horn (C1D2)
D	VISUAL ALARMS 0 = None 1 = Red strobe (C1D2) 2 = Yellow strobe (C1D2) 3 = Blue strobe (C1D2) 4= Purple strobe (C1D2) 5 = Red strobe (not rated) 6 = Yellow strobe (not rated) 7 = Blue strobe (not rated) 8 = Purple strobe (not rated)
E	ENCLOSURE 1 = NEMA 4X non-metallic enclosure 2 = NEMA 4X painted steel enclosure 3 = NEMA 4X stainless steel 4 = NEMA 7 explosion-proof enclosure[2] 5= NEMA 4x non-metallic enclosure with sunshade 6 = NEMA 4x painted steel with sunshade 7 = NEMA 4x stainless steel with sunshade
F	POWER SUPPLY 1 = 110/220VAC (12W available) 2 = 110/220VAC (30W available) 3 = 12VDC ± 5% 4 = 12VDC ± 30% (DC/DC converter, 50W)
	[900] = 900 MHz primary radio [2400] = 2.4 GHz primary radio [TAG] = Stainless steel identification tag [XBN] = C1D2 alarm acknowledge / PTT button [GBN] = Non-rated alarm ack / PTT button

NOTES

Note 1: WiFi and second radio require installation of MODBUS / data logging interface board.
Note 2: Specify XP antenna with NEMA 7 Enclosure Option E = 4

GDS Corp
Gas and Flame Detection