

GDS-98 Wireless System Manager

Manages up to Sixteen GASMAX ECx or GASMAX IIx Wireless Gas Monitors for Toxic or Combustible Gases

- * Central manager for distributed wireless gas detection system
- * Supports up to 16 GASMAX toxic or combustible gas monitors
- * Suitable for use in Class I Div 2 areas with rated strobe or horn
- * Real time clock and event log records alarm history
- * No flashing lights to interpret - full text-driven user interface
- * Choice of 900MHz or 2.4Ghz spread spectrum technology
- * Operates on 110V / 220VAC, 24VDC or Solar Power
- * Cost effective solution for low point count systems
- * Magnetic keypad for non-intrusive operation in hazardous areas
- * Power output adjustable from 10 mW to 1.0 Watt at 900MHz
- * Repeater function retransmits data to GDS-95 Alarm Stations
- * Typical > 1 mile range with local 'whip' antenna (900MHz)
- * Manufactured in USA

The GDS-98 Wireless System Manager synchronizes and monitors up to sixteen GDS Corp wireless gas monitors, provides high intensity audible and visual warnings for identified gas hazards and retransmits alarm messages to remote GDS-95 Alarm Stations or GDS Corp Display & Alarm Controller / Receivers.

Wireless System Manager

The GDS-98 WSM is a self-contained wireless server with LCD display that coordinates and monitors transmissions from GASMAX ECx or GASMAX IIx wireless gas monitors. Communications status, alarm status, battery voltage and percent-of-scale readings are available on the high resolution display. No flashing lights to interpret - all user interaction is via magnetic key and English-language text. Optional audible or visual warning devices are available for general purpose or Class 1 Division 2 rated areas.

The GDS-98 WSM is available with 900 MHz or 2.4 GHz radio modems and can be powered from 24VDC, 12VDC solar systems or 110/220VAC power sources. Units configured with audible warning horn for Class I Division 2 hazardous areas requires 110VAC power.

Repeater

In addition to system management and warning functionality, the GDS-98 can be programmed to retransmit wireless messages to additional GDS-95 Alarm Stations or GDS Corp Protector series Display & Alarm Controllers. Transmit power is adjustable from 10mW to 1.0



*GDS-98
Wireless System Manager,
shown with optional Red
Strobe and Weatherproof
Horn*

watt for 900MHz and is fixed at 100mW (ERIP) with a 3dB antenna for 2.4 Ghz.

Cost Effective Solution

The GDS-98 Wireless System Manager is designed to be the heart of a low cost, highly reliable gas detection system based on 900MHz or 2.4GHz spread spectrum technology. Combined with GASMAX ECx battery powered detectors with six month battery life, a WSM-based system can reliably detect both toxic and combustible gases and is an cost-effective, easy to deploy and easy to maintain.

For systems that require mixed analog MODBUS and wireless inputs, programmable alarm logic and analog or digital outputs, GDS Corp offers systems based on the C2 Quad Wireless Protector Controller or C64 Wireless Protector Controller. These offer highly sophisticated alarm logic, multiple output options, data logging and more.

**GDS
Corp**

Gas and Flame Detection

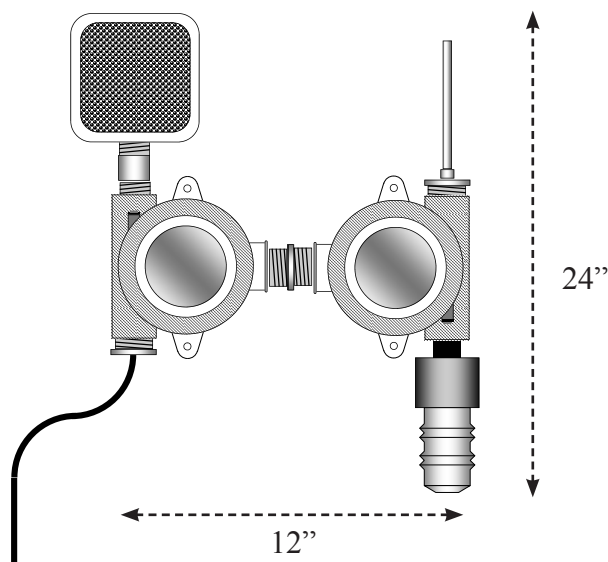
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GDS-98 WSM SPECIFICATIONS	
Power Input	+24VDC (rated horn not available) +12VDC Solar Power (rated horn not available) 90 / 264 VAC, 60Hz (if rated horn, 110VAC 60Hz only)
Display	64 x 128 pixel LCD with
Input	Wireless receiver for 900 MHz or 2.4 GHz broadcasts from GASMAX ECx or GASMAX Iix wireless gas monitors
Standard Output	License-free 900Mhz or 2.4Ghz frequency-hopping spread spectrum wireless modem with data encryption 900MHz power adjustable from 10mW to 1.0 watt 2.4GHz output set at 50mW or 125mW (US only) Receiver sensitivity typically -98dBm
Temp	-25°C to +60°C
Housing	Aluminum housing with epoxy paint standard; #316 stainless steel optional
Dimensions	Without strobe or horn: Width 12" (304 mm), Height 8" (203 mm), Depth 6" (152 mm) Shipping weight 10 pounds (4.5 kg)
Approvals	Suitable for use in Class I Div 2 hazardous areas with rated strobe and/or horn
Warranty	Two years on electronics from date of purchase



Determining Wireless Communications Range

The distance at which any wireless connection will operate reliably 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. Contact GDS Corp for more information.

GDS-98 WSM Order Guide	
GDS-98 A / B - C / D - E - F	
"A"	RADIO FREQUENCY ¹ 1 = 900 MHz 2 = 2.4 GHz
"B"	STROBE ² 0 = None 1 = Red 2 = Yellow 3 = Blue 4 = Green (Steady) 5 = Red (C1D2) 6 = Yellow (C1D2) 7 = Blue (C1D2)
"C"	HORN ^{2,3} 0 = None 1 = Horn (24VDC, not rated) 2 = Horn (110VAC, C1D2)
"D"	POWER ³ 1 = 24VDC 2 = 90-264 VAC, 60Hz 3 = 12VDC
"E"	MOUNTING HARDWARE 0 = None 1 = Plate with pole mount h/w 2 = Plate, h/w and 3ft tall stand
"F"	REPEAT FUNCTION ⁴ 0 = Off 1 = On



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NOTES
Note 1: Specify when ordering; frequency cannot be field modified.
Note 2: Select Class 1 Div 2 rated strobe or horn for use in hazardous areas.
Note 3: When specifying Class 1 Div 2 horn, power must be 110VAC, 60Hz
Note 4: Field selectable