

# 95/TX Alarm Station & Repeater

## Monitor Alarm Status of Remote GASMAX Wireless Gas Monitors Repeater Mode for Increased Range

- \* Monitors data from up to 32 GASMAX wireless gas monitors
- \* Provides four programmable alarm relays and one fault relay
- \* 900Mhz or 2.4Ghz frequency hopping spread spectrum technology
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- \* Client mode when used with C1 *Protector* or C2 *Quad Protector*
- \* Supports low-cost, simplified single point alarm confi
- \* Magnetic keypad for non-intrusive operation in hazardous areas
- \* Power output adjustable from 10 mW to 1.0 Watt at 900Mhz
- \* Repeater mode retransmits all received GASMAX data
- \* Typical > 1 mile range with local 'whip' antenna (900Mhz)
- \* Manufactured in USA

The GDS-95 Alarm Station and Repeater is an integral part of the GDS Corp wireless gas detection system, providing common alarm relays and range-enhancing RF repeater capability in a single device.

### Combined Alarm Status

Able to monitor up to sixteen remote GASMAX gas monitors, the GDS-95 features four common alarm relays (A1, A2, A3 and FAULT) that reflect the status of the remote devices in an "OR" configuration. In addition, the GDS-95 includes a real-time clock and event log that records the time and date of all alarm activation and deactivation events. The four internal SPDT relays are rated at 5A, sufficient to power a local strobe light or audible horn. The status and % full scale reading for any received GASMAX monitor are available via the magnetic keypad-driven, user-friendly interface.

### Repeater Functionality

If environmental conditions are such that a GASMAX signal cannot reliably reach the designated controller / receiver due to distance or obstructions, the GDS-95 can be programmed to receive and retransmit GASMAX wireless messages on a channel-by-channel basis. Transmit power is adjustable from 10mW to 1.0 watt for 900Mhz and is fixed with a 3dB antenna for 2.4 Ghz.

### Cost Effective Solution

Although most systems require the more sophisticated alarming capability found in the GDS Corp C1 *Protector* or C2 *Quad Protector* Controller / Receivers,



95/TX  
Remote Alarm  
& Repeater  
Station, shown  
with optional Red  
Strobe

the GDS-95 can be used as the network alarm monitor / RF server in a stand-alone configuration. In this case, the alarm levels are programmed into each remote GASMAX monitor.

The GDS-95 requires an external source of 10-30VDC and is suitable for 12V solar power applications. Options include local or remote strobe lights, horns and directional and omni-directional antennas.

95/TX Specifications	
<b>Power Input</b>	24VDC
<b>Display</b>	128x64 pixel LCD display
<b>Input</b>	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
<b>Relay Output</b>	Four programmable relays (SPDT 5A @ 30VDC / 240VAC resistive load) plus dedicated FAULT relay
<b>Digital Output</b>	None
<b>Audible Output</b>	Optional local piezo / horn (see option "C")
<b>Visual Output</b>	Optional local strobe (see option "D")
<b>Temp</b>	-25°C to +50°C operating
<b>Housing</b>	Available in non-
<b>Dimensions</b>	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"
<b>Approvals</b>	Approvals pending
<b>Warranty</b>	2 years from date of purchase

### 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.

95/TX Order Guide	
95/TX A/B-C-D-E/F-G-H [900][2400][SS][TAG][XBN]	
<b>A</b>	<b>ANTENNA</b> 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 7 = Explosion proof antenna suitable for C1D1
<b>B</b>	<b>LOCAL STROBE</b> 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) 9 = Dual local strobe option (contact factory)
<b>C</b>	<b>LOCAL HORN</b> 0 = None 1 = 110 dB external horn (not rated) 2 = 110 dB external horn (C1D2)
<b>D</b>	<b>REMOTE LIGHT STACK</b> 0 = None 1 = Remote C1D2 with two strobes (specify) 2 = Remote non-rated with two strobes (specify) 3 = Remote C1D2 with three strobes (specify) 4 = Remote non-rated with three strobes (specify) 5 = Remote C1D2 with two strobes + horn 6 = Remote non-rated with two strobes + horn 7 = Remote C1D2 with three strobes + horn 8 = Remote non-rated with three strobes + horn
<b>E</b>	<b>REMOTE LIGHT STACK CABLE</b> 0 = None 1 = 10ft / 3m suitable for C1D2 w/ quick connects 2 = 25ft / 8m suitable for C1D2 w/ quick connects 3 = 50ft / 15m suitable for C1D2 w/ quick connects
<b>F</b>	<b>MOUNTING HARDWARE</b> 0 = None 1 = Plate with 2" pole-mounting hardware 2 = Plate with 2" pole-mount + 3" yellow stand
<b>G</b>	<b>POWER SUPPLY</b> 1 = 24VDC 2 = 110/220VAC 3 = 12VDC (Solar)
	[900] = 900 MHz primary radio [2400] = 2.4 GHz primary radio [SS] = Stainless steel enclosure(s) [TAG] = Stainless steel identification tag [XBN] = C1D2 alarm acknowledge / PTT button

