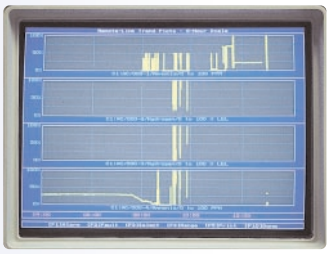
REMOTE-LINK

COMPUTERIZED GAS MONITORING SYSTEMS

FOR 8 OR MORE SENSOR CHANNELS



- Data highway eliminates individual sensor wiring, producing a significant savings in installation costs.
- Modular design enables easy future expansion.
- Can handle systems requiring 100 or more sensors.
- Computer-assisted, automated calibration.
- Graphic display shows sensor locations within your facility and pinpoints alarms.
- State-of-the-art software features data archiving, curve plotting,
- TWA reports, alarm processing, foreign language support, and much more.
- Sensors available for the detection of over 150 different toxic & combustible gases.

INTERNATIONAL SENSOR TECHNOLOGY

The Leader In Gas Detection Since 1972

3 Whatney • Irvine, California 92718-2806 • Telephone 949-452-9000 • FAX: 949-452-9009 • TLX: 4722070

QUALITY-ASSURED COMPANY ISO 9001 Design • Development • Production • Installation • Servicing

Low Installation Cost

Sensors and alarm relays communicate with the **Remote-Link Computer** over a dedicated AC Power line. This data highway eliminates the need for individual sensor wires from the field to the control room, producing a significant savings installation costs.

Step up to HIGH TECH

REMOTE-LINK ADVANTAGE

Easy Expansion

Modular design enables the easy addition of sensors and alarm relays should future requirements arise. This allows the system to grow with your needs.

Number of Sensors

Can accommodate hundreds, even thousands, of sensors, yet still remain as an economical choice for systems with as few as 10 sensors.

Multiple Displays

Whenever necessary, a system can include multiple computers to display readings in control rooms, security posts, etc. Each computer can be set up to display all sensors on a system, or only a portion of them.

Computer Assisted Calibration

Computer assisted calibration makes calibration will save you hours of time. **Zero every sensor in the system with the press of a button**. Then simply apply gas to the sensor and let the **Remote-Link Computer** do the rest. There are no covers to remove, no potentiometers to turn.

Data Archiving and Reporting

The **Remote-Link Computer** archives data and alarms for all sensors on the system. Various reports can be printed out; including historical data of any time period, time weighted average (TWA) calculations, and system configuration reports.

Alarm Processing

Three alarm setpoints can be assigned to each sensor channel, and **Remote-Link Computer** alerts you whenever an alarm threshold has been exceeded. Additionally, the **Remote-Link Computer** will activate the appropriate alarm relays located on the system. Each alarm relay is fully programmable and can be assigned to any single sensor or group of sensors.

Fault Monitoring

The **Remote-Link's** fault monitoring capabilities ensure system reliability and streamline troubleshooting. The **Remote-Link Computer** continuously checks the system for proper operation. Should any system component encounter problems, the **Remote-Link Computer** quickly locates the component in question and alerts you to the problem.

Plant Graphics Display

Plant drawings provided by the user can be loaded into the **Remote-Link Computer**. A graphics display then lets you see the locations of the sensors within your plant. Using the mouse, simply point and click on any sensor to view the current reading and alarm status. When an alarm occurs the **Remote-Link Computer** directs you to the area where the alarming sensor is located. By zooming in you can pinpoint the exact location of the alarm within your plant.

Foreign Language Support

The **Remote-Link Computer** can be setup to display English, Spanish, Russian, German, or a variety of other languages.

Compatibility with Many Types of Equipment

In addition to gas sensors, many other types of equipment can also be connected to a **Remote-Link System.** The **Remote-Link Communicators** can accommodate any device which outputs a 4-20 mA or 0-5 VDC signal. Thus, stack, water, meteorological monitoring—you name it—it can all be done with a **Remote-Link System.**

Curve Plotting

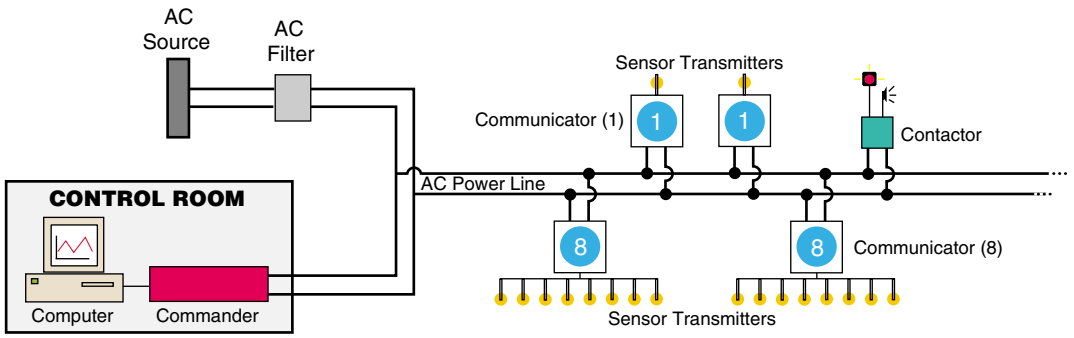
The **Remote-Link Computer** displays a graph of *real time* readings for each sensor—which is user adjustable to show the latest; 4 minutes, 1 hour, 8 hours, or 24 hours of data. This data is continuously updated on a *real time* basis. Also, the archived data of any sensor or sensors can be plotted out for any given time period. And finally, the **Remote-Link Computer** provides graphs showing the response curves for each sensor as well as *"calibrated output curves"*—curves used by the computer for automated calibration.

Free On–Line Factory Assistance

The **Remote-Link Computer** comes equipped with an internal modem which allow **IST** to offer you factory assistance whenever necessary. Simply provide a phone line for the computer, and **IST** can access your computer and provide you with any assistance you may require, ***free of charge!***

and Much More!

BASIC REMOTE LINK SYSTEM



SENSOR TRANSMITTERS: House the sensor and transmit the analog signal from the sensor.

COMMUNICATORS (1 or 8 channel): Digitize the sensor signal and transmit the data to the **Commander**.

COMMANDER: Receives sensor data and sends commands to the **Contactors** to trip alarm relays.

CONTACTORS: Contains 2 alarm relays for lights, horns, etc. which can be activated by the **Commander**.

COMPUTER: Contains powerful monitoring software and interfaces with the **Commander** via an **RS-232** link.

DIRECTORS: (When necessary) Used for systems located in larger facilities. **Directors** tie multiple AC power lines together and/or enable sensor data to be transmitted long distances from the field to the control room.

DESCRIPTION

The **Remote-link System** is a state-of-the-art, computer-controlled, gas monitoring system which allows sensors to communicate with the **Remote-Link Computer** over a data highway—eliminating the individual sensor wiring associated with conventional monitoring systems. The **Remote-Link's** powerful monitoring software includes such features as **data archiving and reporting, curve plotting, alarm processing, and fault monitoring.** Additionally, a graphics display shows a drawing of your plant and the locations of all the sensors in your plant. By using the mouse button to point and click on a sensor, you can view it's current reading and alarm status. A separate screen allows you to view the readings of all sensors simultaneously. When an alarm occurs, audible and visual indications are provided on the computer screen, and the graphics display will pinpoint the area where the alarm is occurring. Alarm relays are also activated to trip horns, lights, etc. Alarm relays are fully programmable and each relay can be assigned to a single sensor or any group of sensors.

DESCRIPTION

The **Remote-Link System** can accommodate hundreds, even thousands, of sensors, yet is still an economical choice for systems with as few as 10 sensors. The modular design of the system enables additional sensors to be added with ease at its low incremental cost, allowing you to expand the system according to your needs. Computer-assisted calibration takes the hassle out of calibration. Zero every sensor in the system with one press of a button! Then, simply apply gas to each sensor and let the computer do the rest. **Calibration just doesn't get any easier than this!**

The **Remote-Link System is extremely versatile** and can be configured any number of ways to suit virtually any application. It's design allows it to accommodate any size facility, and multiple display screens can be provided. Additionally, each **Remote-Link Computer** is equipped with an internal modem which allows **IST** to provide on-line support whenever necessary. **IST** offers sensors for the detection of over 150 toxic and combustible gases. A list of gases detected by **IST's** Solid State sensors appears on the back page. **Electrochemical** and **Catalytic Bead** sensors are also available.

HOW IT WORKS

In a conventional monitoring system, individual wires must be run from each sensor back to the control room. For larger systems especially, this can result in an unreasonable number of wires, making installation both troublesome and costly. The **Remote-Link System** utilizes devices called **Communicators** which digitize sensor signals and transmit them over a dedicated AC power line to the **Commander**. Each **Communicator** accepts up to 8 sensor transmitters, and any number of **Communicators** can be used in a system. The **Commander** is a control room device which acts as the communications "life line" between the **Remote-Link Computer** and the field devices. The **Commander** polls the **Communicators** for sensor data and passes the data along to the **Remote-Link Computer**. If the **Remote-Link Computer** determines that an alarm condition has been exceeded, it sends a command (via the **Commander**) back over the AC line to **Contactors** which trip alarm relays. Each **Contactor** contains two fully programmable relays which can be used to activate horns, lights, etc. Like **Communicators**, many **Contactors** can be used in a system.

IST GAS LIST

The following gases are available for detection using IST sensors. Please contact IST for additional information.

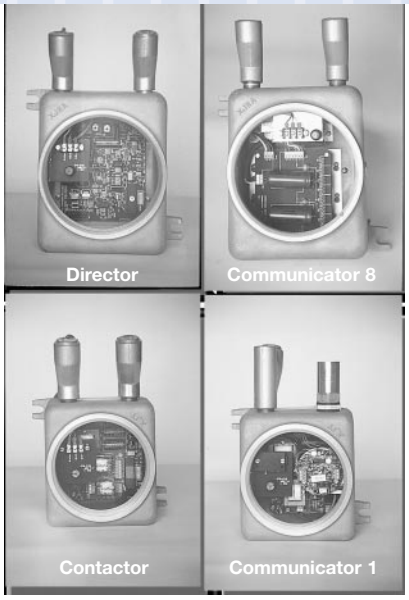
Acetic Acid
Acetone
Acetonitrile
Acetylene
Acrolein (Acrylaldehyde)
Acrylic Acid
Allyl Alcohol
Allyl Chloride
Ammonia
Anisole
Arsenic Pentafluoride
Arsine
Benzene
Biphenyl
Boron Trichloride
Boron Trifluoride
Bromine
Butadiene
Butane
Butanol
Butene
Butyl Acetate
Carbon Disulfide
Carbon Monoxide
Carbon Tetrachloride
Cellosolve Acetate
Chlorine
Chlorine Dioxide
Chlorobutadiene
Chloroethanol
Chloroform
Chlorotrifluoroethylene
Cumene
Cyanogen Chloride
Cyclohexane
Cyclopentane
Deuterium

Diborane
Dibromoethane
Dibutylamine
Dichlorobutene
Dichloroethane (EDC)
Dichlorofluoroethane
Dichloropentadiene
Dichlorosilane
Diesel Fuel
Diethyl Benzene
Diethyl Sulfide
Difluorochloroethane
Difluoroethane (152A)
Dimethyl Ether
Dimethylamine (DMA)
Epichlorohydrin
Ethane
Ethanol
Ethyl Acetate
Ethyl Benzene
Ethyl Chloride
Ethyl Chlorocarbonate
Ethyl Ether
Ethylene
Ethylene Oxide
Fluorine
Formaldehyde
Freon-11
Freon-12
Freon-22
Freon-113
Freon-114
Freon-123
Fuel Oil or Kerosene
Gasoline
Germane
Heptane

Hexane
Hexene
Hydrazine
Hydrogen
Hydrogen Bromide
Hydrogen Chloride
Hydrogen Cyanide
Hydrogen Fluoride
Hydrogen Sulfide
Isobutane
Isobutylene
Isopentane
Isoprene
Isopropanol
JP4
JP5
Methane
Methanol
Methyl Acetate
Methyl Acrylate
Methyl Bromid
Methyl Butanol
Methyl Cellosolve
Methyl Chloride
Methyl Ethyl Ketone
Methyl Hydrazine
Methyl Isobutyl Ketone
Methyl Mercaptan
Methyl Methacrylate
Methyl-Tert Butyl Ether
Methylene Chloride
Mineral Spirits
Monochlorobenzene
Monoethylamine
Morpholine
Naptha
Natural Gas

Nitric Oxide
Nitrogen Dioxide
Nitrogen Trifluoride
Nonane
Oxygen
Ozone
Pentane
Perchloroethylene
Phenol
Phosgene
Phosphine
Phosphorus Oxychloride
Picoline
Propane
Propylene
Propylene Oxide
Silane
Silicon Tetrachloride
Silicon Tetrafluoride
Styrene
Sulfur Dioxide
Tetrahydrofuran
Tetraline
Toluene
Toluene Diisocyanate
Trichloroethane
Trichloroethylene
Triethylamine (TEA)
Trifluoroethanol
Trimethylamine (TMA)
Tungsten Hexafluoride
Turpentine
Vinyl Acetate
Vinyl Chloride
Vinylidene Chloride
Xylene

REMOTE LINK COMPONENTS



Sensor Transmitters

Commander

Remote Link Computer

REPRESENTED BY:

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