

Rel-Tek®

Way-Ahead in Monitoring/Control Systems for Industry

Ahead, Way Ahead... technology, hardware, software, intrinsic safety, automatic calibration, and the all-important experience. Plug and play, really!

Whether you require one or a thousand sensors, Rel-Tek manufactures and supplies complete monitoring/control systems... not just bits and pieces... modularly expandable, and they are fast.

Our world-class Millennia-DX®, PC-based software is simple to setup and easy to use. Rel-Tek will customize your system setup to assure proper operation at the outset. We train your technicians and operators to use and maintain the system.

Drawings and photographs of areas to be monitored can provide familiar backgrounds for easy recognition of HMI screen images. Load your sensor and control icons on top, and avoid tedious drawing of building and equipment details. Understand your complete system status at a glance.

Rel-Tek has pioneered in gas detection for the alternative fuel transit industry since its inception. With over thirty years of proven product development, we have experience and knowledge in monitoring gases in the nastiest industrial environments... think *mines, tunnels, fleet garages, fueling stations and gas fields.*

To find out how Rel-Tek can fill your monitoring needs, call today, 800-RT-EXACT (800-783-9228).

All systems and components are manufactured with pride in the USA.



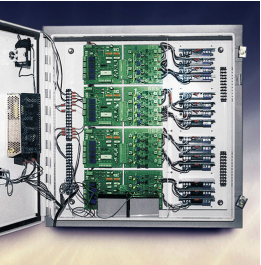
Millennia/DX® System

- Computer Monitoring systems
- Windows or Linux operating systems
- Thousands of I/O capability. Handles 253 field cards, any type.
- Data and alarm logging
- Real-time and off-line viewing
- Remote terminals and workstations
- Factory technical support



Millennia Software

- Monitoring and Control Software for today and the Future World-Class features and utilities
- Data logging, graphics, reports
- Customize your control strategies with icon tools supplied.
- Flash Telemetry, scans 120 sensors per second
- Inside your building or a 20-mile mine extent; hardwired, optical fiber, wireless... or any mix
- Boolean control icons, visual interface
- PID loop control options; complex made easy
- Proven robust in large applications



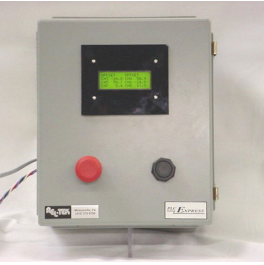
DXcalibar® Panel

- Patented, integrated field I/O panel
- DX-Bus, Calibration, and Barriers
- Compact, eliminates tons of home-run wiring.
- Electricians love them. Just screw on wall and Connect 16 Intrinsically Safe sensors.
- 110VAC-24VDC power supply, backup batteries, and automatic charging circuit
- Includes four DX4404 I/O and telemetry cards, providing 16AI, 16DI and 16DO relays
- 16 dual-channel IS barriers and fuse-free current limiters. .Class I, Div 1&2, Groups BCD, plus MSHA, CANMET and PA
- High speed (120 sensor /sec telemetry)
- Eliminates the "octopus" of field wiring
- Wall mountable 24 x 24 x 8"; Approved UL-508



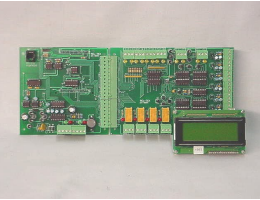
RMcalibar®

- Patented stand-alone I/O panel
- Inexpensive, ideal system for small 1-8 Intrinsic Safety sensor applications
- RM420i or PLC-Express logic units monitor up to 8, 4-20mA, 24VDC sensors
- Add intrinsic safety barriers for placing eight IS sensors in hazardous locations
- Front panel displays all sensor values and alarm/control status
- Wall mountable 24 x 24 x 6"
- Contains 110VAC-24VDC power supply Includes backup battery and charging circuits
- Approved UL-508, Industrial Control Equip.



PLC-Express® -- *Platinum

- Our most powerful PLC -- shown installed in custom enclosure
- Amazing capabilities.
- Eight 12-bit analog 4-20mA inputs, 24VDC
- Four high current digital outputs and 32 programmable digital in/out , mix it up
- Eight 4-20mA analog outputs
- Remote 4x20 character backlit LCD
- NOVA version works like a PC



PLC Express® -- *Gold

- Our own design and manufacture, these PLCs offer essential features, at a low cost. Download setup using laptop PC with Millennia formulation and graphics
- Our most popular 2-board PLC, has lots of bells and whistles, yet compact, versatile
 - Automatic calibration option available
 - PID control is an option
 - Eight 12-bit analog 4-20mA inputs, 24VDC
 - Four digital output relays
 - Four dry contact digital inputs
 - Eight 4-20mA analog outputs (calibrated)
 - Remote 4x20 character backlit LCD



DX-Bus high speed I/O and telemetry cards

- Select from I/O card list to meet your needs --
- System accepts up to 253 card addresses
- 15x sub-addresses for singles

| | | | |
|--------|-----|-----|-----|
| DX1000 | 1AI | | |
| DX0100 | | 1DI | |
| DX2202 | 2AI | 2DI | 2DO |
| DX4404 | 4AI | 4DI | 4DO |
| DX8000 | 8AI | | |
| DX0800 | | 8DI | |
| DX0080 | | | 8AO |
| DX0008 | | | 8DO |

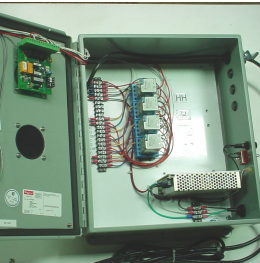
I/O Card specs

- DX-Com 19.2KB DX-bus drivers
- DX-Links, repeaters, splitters, isolators for one-mile extensions and branching
- 18-30VDC power, 35mA for comx
- Add sensor and control loads.
- Analog inputs are 4-20mA
- Digital inputs are dry contacts
- Analog outputs are 4-20ma, 5V max
- Digital outputs are 5A SPDT relays
- Fully loaded system can handle 3,795 analog sensors, digital switches and controls



MagiKal® Fully Automatic Sensor Calibration Utility

- Eliminates costly calibration labor
- Cuts cost of cal-gas supplies
- Extends gas sensor life by about 50%; No kidding!
- Calibrates one or 1,000 gas sensors at a time.
- Pays dividends that can reimburse cost of system In 5 to 7 years
- Unique to Rel-Tek, MagiKal systems operate nationwide, some for a decade.
- Calibrates monthly, weekly, daily or any time you feel like it. Fifteen minutes and it's done.
- Generates cal report. Graphs show sensor history



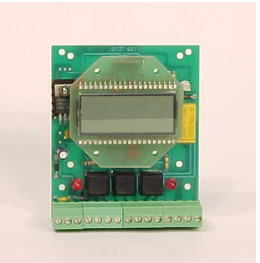
TelEcon-401®

- Stand-alone Field I/O panel contains all functions for monitoring and control
- Monitors 1-8 sensors in non-hazardous areas
- Uses one or more RM420i monitoring units
- Power supply and back up batteries sized to accommodate system load.
- Unpowered (24VDC) versions available
- Wall mountable 14 x 12 x 4" up to 24 x 24 x 8"



PLC Express® -- *Silver

- Our most economical single card PLC for small, High speed, but uncomplicated apps.
- Eight 12-bit analog 4-20mA inputs
- Four digital output relays
- Eight dry contact digital inputs
- One 4-20mA analog output
- Remote 2x16 or 4x20 character backlit LCD
- 24VDC



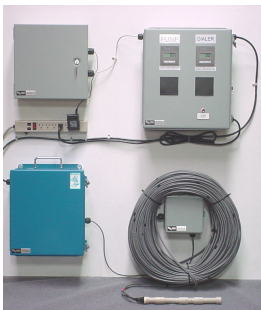
RM420i® Relay Module

- A fantastic, low-budget, programmable single card monitoring module -- indeed, a virtual PLC.
- Monitors just one 4-20mA, 24VDC sensor.
 - Continuously displays value
 - Two user settable trip points
 - Two SPDT output control relays
 - Settable range and decimal
 - Hysteresis adjustable to suit
 - 1/2" high backlit LCD display
 - Three-key pick-menu programming.
 - Pass-through 4-20ma signal
 - Easy panel mount; 3" dia punch out



SafeBoss® Single Sensor Controller

- Integrated control panel for one sensor fresh air or hazardous (IS) sensor classification
- 110VAC powered, 24VDC supply to sensor, 4-20ma signal monitoring
- Panel displays sensor status
- Select any Rel-Tek sensor to monitor -- combustible, toxic, smoke, temp, RH, pressure, air velocity, vibration or other.
- Two field-settable relays, DPDT, 110V/10A. Install panel in fresh air, connect to sensor with 3-conductor shielded cable, max 500 ft distance.
- Add dual-channel I.S. barrier Class I, Div 1/2 Group, BCD.



WaterBoss™

Down-hole water level monitoring system.

- Submersible pressure transducer, barometric pressure compensated
- Uses TelEcon-401 controller with BlueBaby integrated with MSHA approved barriers.
- 110VACV power to surface controller. Optional dialer or E-mailer
- Up to 2,500 ft of down-hole cable, monitors up to 35 ft of water depth
- 4-20ma output with surface display and relays
- MSHA approved 18-ISA080005-0, MultiBoss/DP plus Classifications G, H and L for hazardous mine areas.
- PA approvals



MagneBoss™ System

Slip/sequence control for conveyor belts

- MSHA-classified precision RPM monitor.
- Conveyor belt monitoring network and logging for enhancing safety and productivity
- Rel-Tek's PLC-Gold and four RPM-Boss (electronic tachometers)
- Adjustable slip ratio, self-calibration and setup
- Links to Millennia monitoring system for telemetry surface display and monitoring
- Maximum 63 belt conveyor belts



WellBoss™

Gas well monitoring system

- Four wide-spectrum natural gas or toxic gas sensors, accepts all components of natural gas.
- Central main controller on site manages four satellite sensor units in quadrants.
- AC or solar power
- Rechargeable batteries
- Fully automatic sensor calibration cuts maintenance cost.
- Audio/Visual alarm on site
- Designed for 10 years of life
- Wired or wireless sensors
- Internet/phone messaging
- Remote interrogation



GasBoss*100® /AP

- Wide spectrum -- 85 combustibles, methane+
- High reliability combustible Gas Sensor 11-30VDC, 0-50-100% LEL, 4-20ma linear signal
- For natural gas, methane, ethane, propane and hydrogen.
- 3-wire hookup, 11-30VDC, 10 Year MTBF
- Intrinsically safe; MSHA, PA, CAN-NRC mining, plus UL-913 Class I, Div 1 and 2 approvals.
- Available in aluminum (AP) or NEMA 4X
- Thousands in operation nationwide for decades.
- Dual filters handle dust, moisture, diesel exhaust, chemicals



ToxiBoss®

Toxic Gas Sensor

- A host of MSHA, PA, CAN-NRC, UL, NRTL hazardous area approvals for underground and above ground, Class I, Div 1, Group BCD
- Units available for CO, O2, NO2, SO2, NH3, H2S and CL2
- 11-30VDC; custom ranges, 4-20ma output
- 3-wire hookup; Low current, 60mA
- Available in NEMA 4X (wall mount shown above) or aluminum (AP). Optional meter (digital or analog)
- MTBF of 6-10 years
- See FireBoss® for mines



Additional Sensors (not all shown)

- Pressure (upper left)
 - Smoke (upper right)
 - Air flow (lower left)
 - Temperature (lower right)
 - Vibration, Gs or Velocity
 - Relative Humidity
 - RPM (precision tachometer)
-
- All above sensors are 4-20mA
 - 11-30VDC, 3-wire, 60ma max
 - MSHA classified for methane locations of coal mines



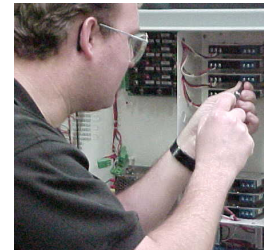
RA-1000 Series Remote Alarm

- Xenon flasher and horn, individually activated by 10-28VDC
- 0.4A peak current drain per strobe (optional cage)
- Distinctive shrieking horn 105db@ 2ft
- Bright 10-50 candela strobe; specify clear, amber, blue, red or green. 1,2, or 3 strobe versions
- Low current 10-LED versions also available
- Permissible versions are available for underground coal mine applications.



LDS™ Leak Detection Systems for Vehicles

- Leak Detection System
- Monitors for combustible gas in four locations
- Compact controller fits in cab in driver's view.
- Bright LEDs show OK or alarm status at a glance.
- Audio alarm sounds to alert driver of possible hazardous condition
- Relay contacts activate for controlling local equipment by others.



Additional Equipment

- Auto dialer/E-mailer
- Tank and electronic cabinets
- Hot Standby
- Remote workstations
- Large LED monitors
- Radio and Fiber Links

Special Services

- Design and integration
- Specifications and Standards
- Customized controls
- Acceptance Testing
- On-site service and training
- Remote support
- Q-Star, quarterly visit program
- Factory training for system users



Call us - Toll free
800/783-9228

- Complete monitoring systems
- Lowest cost of ownership
- Longest life, safest, wide spectrum sensors
- Intrinsic safety, easy to use and maintain
- MagiKal - automatic sensor calibration
- HMI Graphics, data logging, archiving
- Modular, expandable architecture
- Lowest cost of ownership
- Proven technology, nationwide
- Over 35 years experience

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**Monitoring
Control
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For
Industry**

**Combustible
Gases
Toxic Gases
Alarms
Controls**