

INNOVATIVE, RUGGED AND RELIABLE
INDUSTRIAL TELECOMMUNICATION PRODUCTS



In2iT IN-PLANT COMMUNICATIONS SYSTEMS

GUARDIAN TELECOM In2iT IN-PLANT COMMUNICATIONS SYSTEMS



NEW GENERATION MODULAR IP PAGE TALK / PAGA, INTERCOM PLATFORM

As plants modernize network infrastructure to support IP based communication and improve network topologies, they rely on Guardian Telecom to provide them with the latest technology - delivering easy to use, rugged devices to solve In-Plant Communication concerns while maximizing integration options and easing implementation costs.

Guardian Telecom's Next Generation In2iT In-Plant Communications System(s) was designed using a forward thinking approach, with the future in mind for additional support and expansion capabilities, solving major limitations of existing and current in-plant communication solutions and going beyond traditional thinking with Hybrid Analog/Digital Technology.

When we designed our In2iT in-plant communications system, it was based on client requests to reduce complicated configuration and system controls, improve maintenance and system upkeep, decrease cabling costs and to be fully backwards compatible. We went beyond the industry standard to meet those challenges; like, rugged reliable components, a new intuitive and flexible user interface, remote configuration monitoring and management, fiber connection ready and compatible with all legacy infrastructure including endpoints and easing installation costs. We future proofed for features so your facility's current needs are met while also anticipating those of tomorrow.

At Guardian we have decades of experience with equipment in operation equally as long. Guardian Telecom products are engineered from the ground up to work reliably, provide excellent value and last – especially in the roughest weather, toughest applications and most extreme environments.

Simply put, Guardian Telecom products are built rugged, tough, and dependable to last in the harshest environmental conditions in the world. Guardian Telecom is offering you a new standard in In-Plant communications design, reliability, safety, quality and value.



In2iT SYSTEM ARCHITECTURE

Guardian Telecom has retained its traditional system architecture at the base concept level. It is a proven and reliable process for managing in-plant paging and communications, alarm management/broadcast and more.

The system consists of the System Control Frame (main communications system rack) with the end point communication devices (talk stations, paging amplifiers, signaling devices, etc). End Point Stations can individually wired to the system cabinet or wired from station to station to reduce cabling requirements and integration costs.

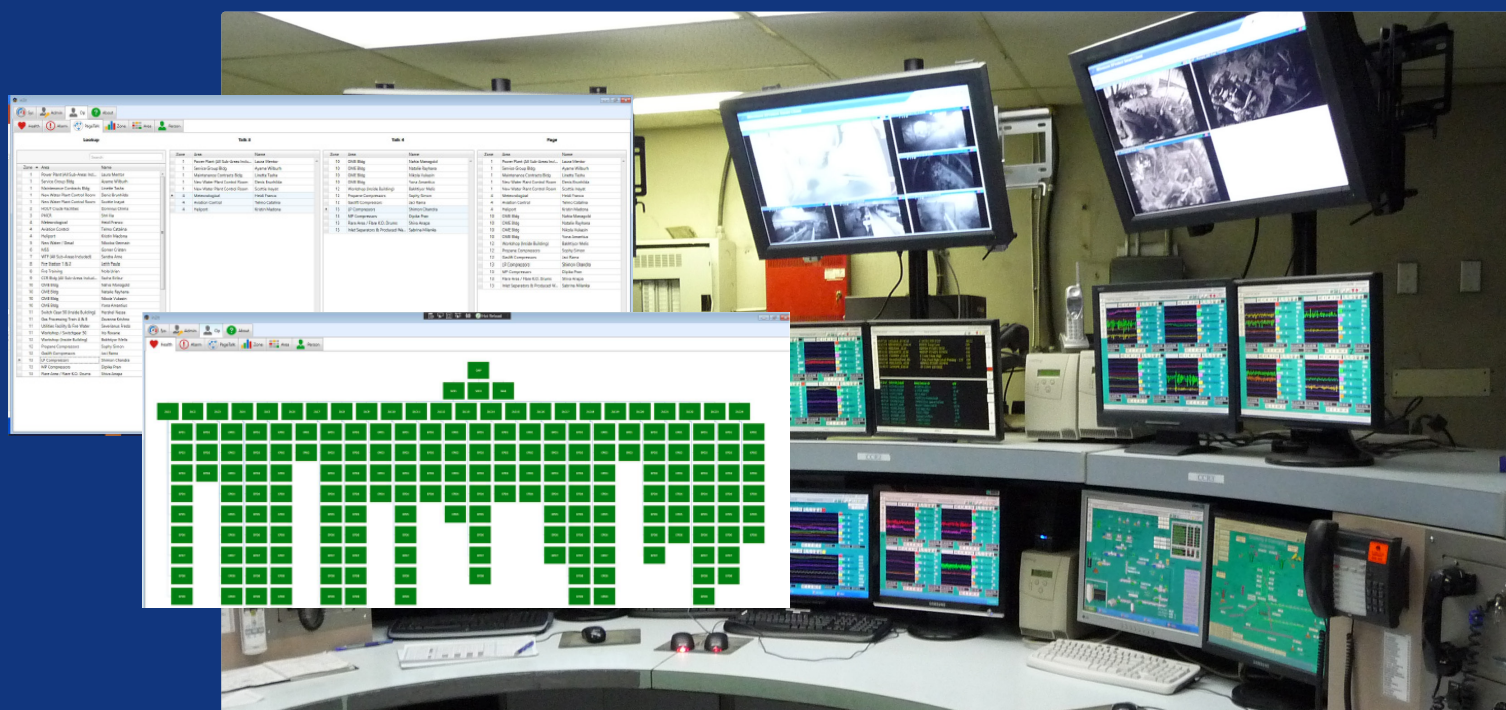
In2iT SYSTEM ARCHITECTURE

The heart of the In2iT Communications System is the System Control Frame (SCF) that has been totally redesigned. We've re-engineered the system to provide the features the industry demands utilizing our advanced product technology with just the right amount of open architecture to ensure the systems can be expanded and customized. All of the devices within the SCF are hardened for high reliability and high stability.

Some of the key features we have introduced include the following:

- Wide range of power compatibility.
- A whole new Graphical User Interface designed to assist operators, engineers and maintenance to manage the communications network, zone control, paging services and of course alarm monitoring and management plus more.
- The Secure Engineering/Maintenance Mode will allow local and remote management of devices; setting up audio broadcast levels, microphone sensitivities, etc. giving our customers the flexibility to manage the facility as environmental conditions change.
- Diagnostics to perform automated/manual full system wide tests or zero into an individual station.
- We have a new standardized Main Distribution Frame to ease connections from the end points through to the System Control Frame.

In addition to the above, all of the Guardian equipment within the System Control Frame are equipped with real time status monitoring/communications to support any necessary redundancy combinations. This includes the primary system controller. Should an alarm monitor fail as an example, the fault is detected, communicated and the backup module immediately takes over.



In2iT IN-PLANT COMMUNICATIONS SYSTEMS END-POINTS

In2iT Guardian Telecom Page Talk Handset Stations - same ease of use, same hardened exteriors, same reliability but a whole new core. Our new page talk combines the best of digital technology while allowing connection to the analog world. We've boosted the paging power range from the traditional 12W to 30W.

These stations are beyond "smart". From remote locations one can access each station or groups of stations. Perform diagnostics, control the paging amplifier volume to the speakers. In normal operation the station will continually self monitor it's status and silently report to the SCF for real time monitoring. Someone drop a handset? Not a problem! The stations internal monitoring algorithms will detect this, report it and then place the unit back into an on-hook state. You may still see a rotary knob for switching talk lines but inside the audio management is all digital, eliminating opportunities for noise due to worn or dirty switch contacts.

In2iT RANGE IN-PLANT COMMUNICATIONS SYSTEM(S)

Features and Benefits

- A/B Architecture
- N+1 Architecture
- Central / Distributed Paging
- Standardized Main Distribution Frame (MDF) for wiring ease
- 6 Zones Standard (Expandable to 60 Zones)
- Hot swappable Zoning Modules
- 24 Dry, 8 Wet Alarm Inputs Standard (Expandable)
- Alarm Priority Reconfiguration without re-wiring
- Software Configurable
- Secured System Management
- Multiple Security Levels (administrator, operator & service) to tailor feature access as needed
- Remote Diagnostics and Monitoring
- Remote Speaker Level Management
- Supports both IP and Analog Endpoints

In2iT RANGE SYSTEM ENDPOINTS

Features and Benefits

- Microprocessor based technology
- 30W integrated paging amplifier
- Self-Monitoring / Diagnostics
- Remote Configurable
- Hazloc Certified
- Indoor, desk, outdoor and hazardous area end points
- Handset & Amplifier or Amplifier only options
- Easy one button access to operator
- Backwards compatible to legacy Guardian systems





THE GUARDIAN TELECOM ADVANTAGE

Industry Leading 5-Year Warranty

As a reflection of our unwavering commitment to quality, Guardian Telecom offers our industry leading 5 year warranty, so you have complete peace of mind. Guardian Telecom products are engineered from the ground up to work reliably and last, especially in the roughest weather, toughest applications and most extreme environments. Our products are built to last.

Value

Guardian Telecom competitively priced products have added value for you. Because our products are built to last, require less repairs and will keep working in the most difficult conditions, you save money in the long term. No costly repairs, no expensive downtime, no replacing broken telecom equipment; the result, your net operating costs will go down. Guardian Telecom is cost effective.

Experience Counts

Guardian Telecom brings you a great deal of industry knowledge and experience because we've worked with all types and sizes of businesses. We understand that different industries have unique needs, and the solution you need is not just another commodity.

Custom Solutions

The key to Guardian's growth is our commitment to working closely with customers and responding to their needs, instead of trying to shoe-horn products that do not fit. In fact, the customization of products and the development of new products, has been one of the cornerstones of our customer focus which continues to this day.

Knowledgeable People

We know that to help you succeed, we must keep pace with the changes and challenges you face daily. To do that we believe we have the best, the most experienced and the brightest personnel available in sales, manufacturing, engineering and customer service in this market. We are experts at what we do for you.

Made in Canada

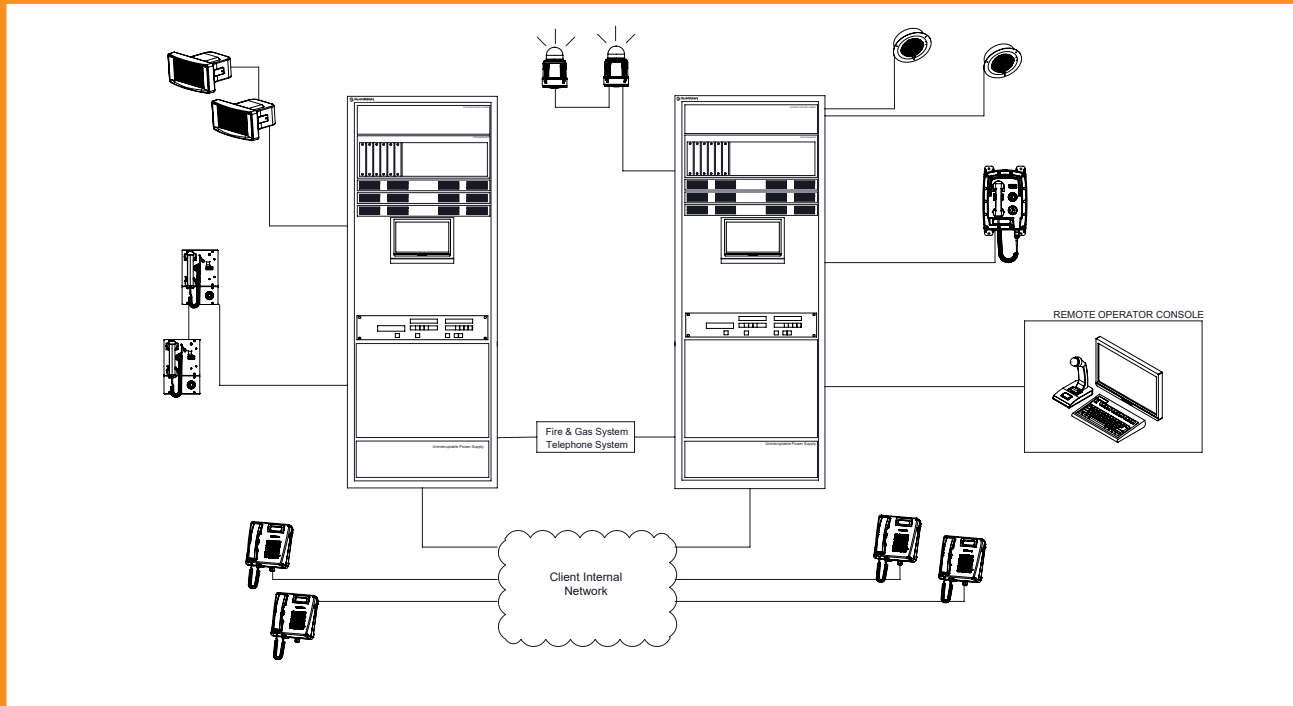
We've been proudly building Guardian Telecom products in Calgary, Alberta, Canada since 1986. Manufactured in our modern, CSA, UL and ATEX approved, state of the art facility, Guardian telephones meet or exceed the approved standards and requirements for the environments they are designed for. Our manufacturing team boasts the ultimate commitment to safety, quality and your satisfaction.

Your Results

Our advice is expert. To receive what you need; in fact, what you want, you can trust Guardian Telecom. We know your industry, and we are dedicated to serving our customers unique needs through our standard, customized and valuable solutions. And our proven track record of success means that you will receive the results you are looking for.

In2iT SYSTEM SPECIFICATIONS

In2iT RANGE IN-PLANT COMMUNICATIONS PLATFORM



ENGINEERING SPECIFICATIONS

SYSTEM CONTROL FRAME

ELECTRICAL REQUIREMENTS

Input Supply Voltage 110VAC to 250VAC
 Power Cycle 50/60 Hz

MECHANICAL SPECIFICATIONS

System Cabinet (2000mm x 800mm x 800mm) Integrated Fans
 Color RAL-7035, Light Gray

ENVIRONMENTAL

Enclosure Type Nema 12 Enclosure (Indoor Use Only)
 Temperature -40C to +70C
 Humidity 0 - 95% RH

INDOOR ENDPOINTS

ELECTRICAL REQUIREMENTS

Input Voltage: 90VAC – 250VAC; 50/60 Hz
 Current (Nominal): <500 mA
 Current (In-Rush): 0.5A @ 120VAC
 0.25A @ 220VAC
 Optical Input 1 -4: 1mA nom
 Dry Contact Relays (Non-Fused): 3A @ 120VAC
 Fuse: 4 A

SPEAKER AMPLIFIER

Amplifier Maximum Output Power 30 Watts RMS
 Amplifier Gain 50 dB
 Frequency Response 250-4000 Hz
 Distortion 1.0% Maximum THD @ 1000 Hz
 Input Impedance 200 K Ohms Nominal

MECHANICAL SPECIFICATIONS

Body Construction Powder Coated 16 Ga Steel
 Faceplate Corrosion Protected & Powder Coated
 Hand Set Construction High Impact Polycarbonate
 Standard Mounting Vertical Wall
 Connection to System Conduit or Cable Gland

ENVIRONMENTAL

Weather Proof Enclosure Type 3R
 Temperature -40° to +140°F (-40° to +60°C)
 Humidity 0 - 95% RH Non-Condensing

OUTDOOR END POINTS

ELECTRICAL REQUIREMENTS

Input Voltage: 90VAC – 250VAC; 50/60 Hz
 Current (Nominal): <500 mA
 Current (In-Rush): 0.5A @ 120VAC
 0.25A @ 220VAC
 Optical Input 1 -4: 1mA nom
 Dry Contact Relays (Non-Fused): 3A @ 120 VAC
 Fuse: 4 A

SPEAKER AMPLIFIER

Amplifier Maximum Output Power 30 Watts RMS
 Amplifier Gain 50 dB
 Frequency Response 250 - 4000 Hz
 Distortion 1.0% Maximum THD @ 1000 Hz
 Input Impedance 200 K Ohms Nominal

MECHANICAL SPECIFICATIONS

Body Construction Thermoplastic Resin
 Faceplate Corrosion Protected & Powder Coated
 Standard Mounting Vertical Wall
 Hand Set Construction High Impact Polycarbonate
 Connection to System Conduit or Cable Gland

ENVIRONMENTAL

Water/Dust Tight Enclosure Type 4X & IP66
 Temperature -40° to +140°F (-40° to +60°C)
 Humidity 0 - 95% RH Non-Condensing

Guardian pursues a policy of continuous improvement, therefore specifications are subject to change without notice.

HOW TO GET STARTED - OUR SERVICES

In our experience no two Communication Systems will be exactly the same and trying to force fit an off the shelf system to meet the actual needs of a user can limit its effectiveness of required functionality. For optimum results we find it is important to work hand in hand with our clients to analyze their needs, project parameters and discuss the options that are available to meet them. There is no doubt that the best time to start the discussion for your system project needs is early in the planning process. The depth and cost of all services is negotiated on an individual project basis. It's as easy as 1 - 2 - 3 - 4.



1

ASSESSMENT SERVICE

We ask the important questions. It all begins with a conversation. We'll ask - What is the proposed schedule? Is there an existing system? Is there a need for a sound study or other on-site inspections? Are there plans for expansion? What options are available to the customer? These are some of many questions that may need to be considered when developing a successful communication system.

2

PLANNING & ENGINEERING

With your goals ever in mind and with our collaborative approach, our professional designers use state-of-the-art tools to suggest, develop and plan a winning communications system design. Our recommendation helps ensure the finished result meets all your needs and your budget.



3

SITE SERVICES

Because Time is Money... Guardian Telecom has created a seamless process designed to ensure a successful implementation. From delivery to commissioning to training, Guardian Telecom is with you every step of the way. Our best-in-class site services help protect and support your investment by optimizing product performance, and reducing unplanned downtime.

4

CUSTOMER SERVICE

Service after the sale and installation is a significant part of the solution. Partnering with someone you can trust is critical to effectively maintaining and servicing today's communication systems. Should any issues arise or you have any questions on expanding / downsizing, our pros are just a phone call away.



Guardian Telecom is known as a world leader of building rugged, safe, reliable telecommunication devices used in harsh environments, extreme elements, critical infrastructure, and safety-critical and mission-critical applications.

Residing in power plants in the hot desert sun to production platforms battling arctic temperatures, and high vibrations within manufacturing plants, or extreme environmental conditions in nuclear facilities, thermal and hydro plants, and into mining excavations. Our equipment and systems are manufactured for transportation facilities, tunnels, highways, rail systems and airports. Our products are placed in pharmaceutical plants, grain, and food processing plants.

Guardian Telecom's safety and rugged equipment is distributed throughout various state and federal institutions including college and university campuses worldwide.

Our products are utilized in the travel and entertainment industry such as hotels, resorts, theme parks, baseball and football stadiums, golf courses, the movie and production industry, entertainment arenas, and on travel cruise liners. Outdoor gateway entrances, border crossings or high-end security gated facilities, and fenced-in areas.

Top military units such as the Marines, Navy, Army, and intelligence agencies acquire our ruggedized equipment to be used in ships, buildings, tankers and war zones. Ranging from NASA to Space X using Guardian Telecom's equipment throughout its testing and launch facilities to corporate and commercial day-to-day work environments.

Experience Counts - You can trust Guardian Telecom

GET THE GUARDIAN TELECOM ADVANTAGE!

Guardian Telecom products come with an industry leading 5 year warranty. Don't accept anything less.

Guardian Telecom Ltd.

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