



Bangalore India Section

ISA – The International Society of Automation

presents

One-Day Seminar

On

**Wireless in Industrial Automation
Opportunities & Challenges**

Sponsored by

Perfection in Automation
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CPRI



Date: **12th November 2011**

Venue: **Hotel "The Capitol", No. 3, Rajbhavan Road,
Bangalore 560 001**



Bangalore India Section

Wireless in Industrial Automation



Wireless instrumentation and wireless applications surround us. Yet, when it comes to installing wireless devices such as wireless sensors, wireless LANs, or RFID based devices in an industrial environment, engineering professionals are only beginning to appreciate its benefits. They are keen to consider wireless as a viable option. However, as with any new technology that is peddled as an alternative, they will want to make a careful evaluation of the risks and returns involved.

Several virtues of wireless technology in manufacturing are an established fact. Of these, the emergence of hassle free interface between devices for control and data acquisition applications is significant. It has helped improve productivity levels, raise performance parameters, and more importantly reduce costs for most manufacturers and OEMs. The industrial wireless technology, over the years has also gained maturity with establishment of standards such as that of ISA100 coming into being.

**ISA100
Wireless**

Flexibility in manufacturing is probably another major contribution that industrial wireless technologies including that of RFID applications have brought about. Aside of lowering engineering costs enabling mobile (on-the-move) operations bring about the added flexibility in current installations. Manufacturers and OEMs prefer step-by-step or incremental solutions as they strive to assimilate the advantages of industrial wireless solutions even as they evaluate the cost benefits accruing to them.



The manufacturing world today demands solutions that desire reduced human intervention in their operations. The global economic growth and particularly manufacturing will be inclined to investments in improving operational efficiencies in preference to major capital costs. Industries such as automotive, aerospace, machinery, defense, and others are enhancing their operational efficiencies by becoming data-hungry for analysis and control. Wireless technologies including rightful deployment of RFIDs, indeed lends to enhancing operational efficiencies. As widely reported in the recent past, it is the discrete industries that are fine exhibits of the first wave of this technology absorption.

Incidentally, forthcoming issue of ISA's InTech magazine will have the cover story of "Wireless in Action". The timing is indeed appropriate for ISA Bangalore Section's national seminar on "**Wireless in Industrial Automation Opportunities & Challenges**" slated for November 12, 2011 at Bangalore.

Not long ago, ISA's InTech magazine carried an article on Wireless technologies by Patrick Schweitzer titled "**Users want happy union with wireless, but doubts lingers**".



This seminar facilitated by ISA Bangalore, is precisely intended to serve the understanding of Indian end users, manufacturers, OEMs, Research Institutions, Government organizations, and suppliers' representatives.

Here is what is in store for you:

- Features, Data throughput, and Update rates
- Developing Appropriate Topology and Architecture
- Applications Development from Data Collected from Wireless and RFID devices
- Security and Failure Recovery Methodology (such as due to transmission errors and power failures)
- Interoperability and coexistence at various levels
- Mesh technologies
- Instrument or control device with a transmitting radio (wireless instrument)
- Power source for the wireless instrument
- Receiver (access point or gateway) capable of receiving communication from the wireless instrument or device
- Power source for the access point or gateway
- In order for the wireless instrument and the access point/gateway to communicate, consider these wireless characteristics:
- Guidance in managing the wireless space – such as related to physical characteristics, competing electromagnetic devices, and other interferences
- Communication protocols such as standards and radios WiFi (IEEE 802.11g),



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Zigbee (IEEE 802.15.4), ISA100.11a (IEEE 802.15.4)

- Security features
- Applications capable of concentrating the data received from wireless devices

The Seminar - “Wireless in Industrial Automation”

This all India seminar will look at Automation trends in the discrete and continuous process wireless technology industry, The seminar is designed and structured to bring value to Instrumentation engineers and automation professionals from the end users, consultants, research institutes, and other stakeholders and influencers in the wireless automation scenario. They will be benefited, as the seminar will provide an opportunity to enrich their knowledge and enhance their capabilities. The seminar speakers will discuss the current automation trends and evolving standards. The speakers will be from the industry comprising automation suppliers to wireless companies, end users and consultants.

ABOUT ISA AND ITS ACTIVITIES

Founded in 1945, ISA is a leading, global, nonprofit organization that is setting the standard for automation by helping over 30,000 worldwide members and other professionals solve difficult problems. Based in Research Triangle Park, North Carolina, ISA develops standards, certifies industry professionals, provides education and training, and publishes books and technical articles.

ISA helps automation professionals around the globe, with careers in engineering, R&D, technology, management, and sales. They work in a diverse array of industries, building, operating and maintaining the processes that do everything from monitor air quality to build airplanes. By participating in the Society, automation professionals are smarter on industry issues, more valuable to their companies, and more effective at their jobs. Pure and simple, ISA is the one essential unbiased source to the world’s knowledge of automation.

The mission of ISA as the global society for instrumentation, systems, and automation is to maximize the effectiveness of ISA members and other practitioners and organizations worldwide to advance and apply the science, technology, and instrumentation, systems, and automation in all industries and applications. ISA is recognized worldwide as a leader in non-biased, vendor-neutral education and

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training programs for automation professionals. Industry professionals, whether an experienced engineer, practicing technician, or newcomer to the industry, can hone their skills at ISA's regional training centers, through onsite training programs at their company, or via distance education.

ISA BANGALORE SECTION

ISA Bangalore Section is an active and a vibrant section of automation professionals under District 14 of ISA. Constant strive to bring value to the Instrumentation and Automation professionals is the main objective. Seminars organized by ISA Bangalore Section focuses on providing useful user-consultant-supplier interaction forum for Industry professionals to upgrade their knowledge base and make business related decisions in the choice of technology. Besides seminars, members of the section and the instrumentation professionals participate in periodic lecture programs from eminent speakers from the industries. The growing need of students of its Seven ISA Student Sections also benefit from its programs which are carried into their campuses, facilitating preparation and a better crop of students ready for industry.

**One-Day Seminar on
Wireless in Industrial Automation**

12th November 2011

Programme

9.00 am	Registration
9.30 am	Inauguration
9.45 am	Key Note Address – Thomas Varghese
10.30 am	Tea/Coffee Break
10.45 am	Session I - Speaker-1 – B&R Automation
11.30 am	Session II - Speaker-2 – LAPP India
12.15 am	- Speaker-3 – Pepperl & Fuchs
12.45 pm	Lunch
1.45 pm	Session III - Speaker-4 – CPRI
2.15 pm	- Speaker-5 - ABB
2.45 pm	- Speaker-6 - Belden
3.15 pm	- Speaker-7 – Phoenix
3.45 pm	Tea/Coffee Break
4.00 pm	Panel Discussions
5.00 pm	Conclusion & Valedictory



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ISA – The International Society of Automation

One-Day Seminar on Wireless in Industrial Automation

12th November 2011

Delegate Registration Form

Please register the following delegates:

Organisation:					
Address:					
Sl. No.	Name	Designation	Phone No.	E-Mail ID	Delegate Fee Rs.
1					
2					
3					
4					
5					
Total Fee					
Enclosed A/c. payee Cheque/Demand Draft No:			Date:		for Rs.
Name of Bank & Branch:					
To be drawn in favour of ISA Bangalore Section , payable at Bangalore					

Delegate Fee:

ISA Members	Non ISA members	Members intending to join ISA* ²
See Note* ¹	₹ 2100/-	₹ 3900/-

*1 : The seminar is free for current ISA Bangalore members, ISA members from other sections, a nominal defraying costs of Rs. 950/- is applicable. New members willing to join ISA are advised to avail the discounted membership option along with the seminar fees.

*2 : The regular membership of ISA Bangalore is Rs. 2750/- per year and an opportunity is provided with a discounted membership fee if one attends the seminar and opts to become a member.

This option is applicable also to former members as well whose membership has lapsed over a period (kindly mention your membership number). Those who intend to join afresh are requested to fill the membership application form which can be had on request. ISA members other than Bangalore Section are requested to attach copy of their membership card along with their nomination form.



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N.B: Kindly send the filled up form along with your payment cheque to:

ISA Bangalore Section,
C/o ARC Advisory Group,
No. 20 GF, Annaswamy Mudaliar Road,
Sivan Chetty Garden Post,
Bangalore – 560 042

Mr. **Palaniyappan**, Administrator

Tel: 080 2554 7116 / Fax: 080 2554 7115

E-mail: s_palaniyappan@hotmail.com

Mobile: +91 98450 74928

<hr/> Signature
 Seal of the Organisation

Event Calendar at www.isa.org:

<http://www.isa.org/calendar/CalendarRedir.cfm?EventID=1715>