

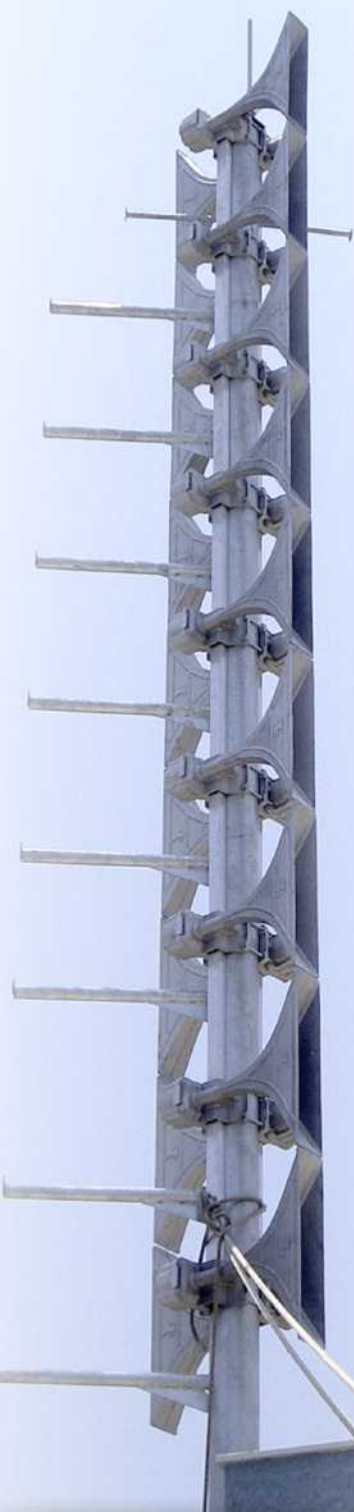
warning **PUBLIC**



SiRcom

# SiRcom

GESELLSCHAFT FÜR SYSTEMINTEGRATION  
& KOMMUNIKATIONSTECHNIK mbH



# The Company

## Experience the difference

**SiRcom** is a system house for Public - Warning - and Information-Systems founded in 1993 by a team of experts with many years of knowledge in acoustics and warning technologies.

Since the beginning our founder Norbert Hunger has taken over business as CEO and established an International and successfully operating company.

**SiRcom's** activities worldwide are coordinated from the Headquarter in Forstinning near Munich.

**The SiRcom** team has many years of experience not only in the development of new products but also in the handling of complete turn-key warning and communication systems around the world.

## Culture & Philosophy

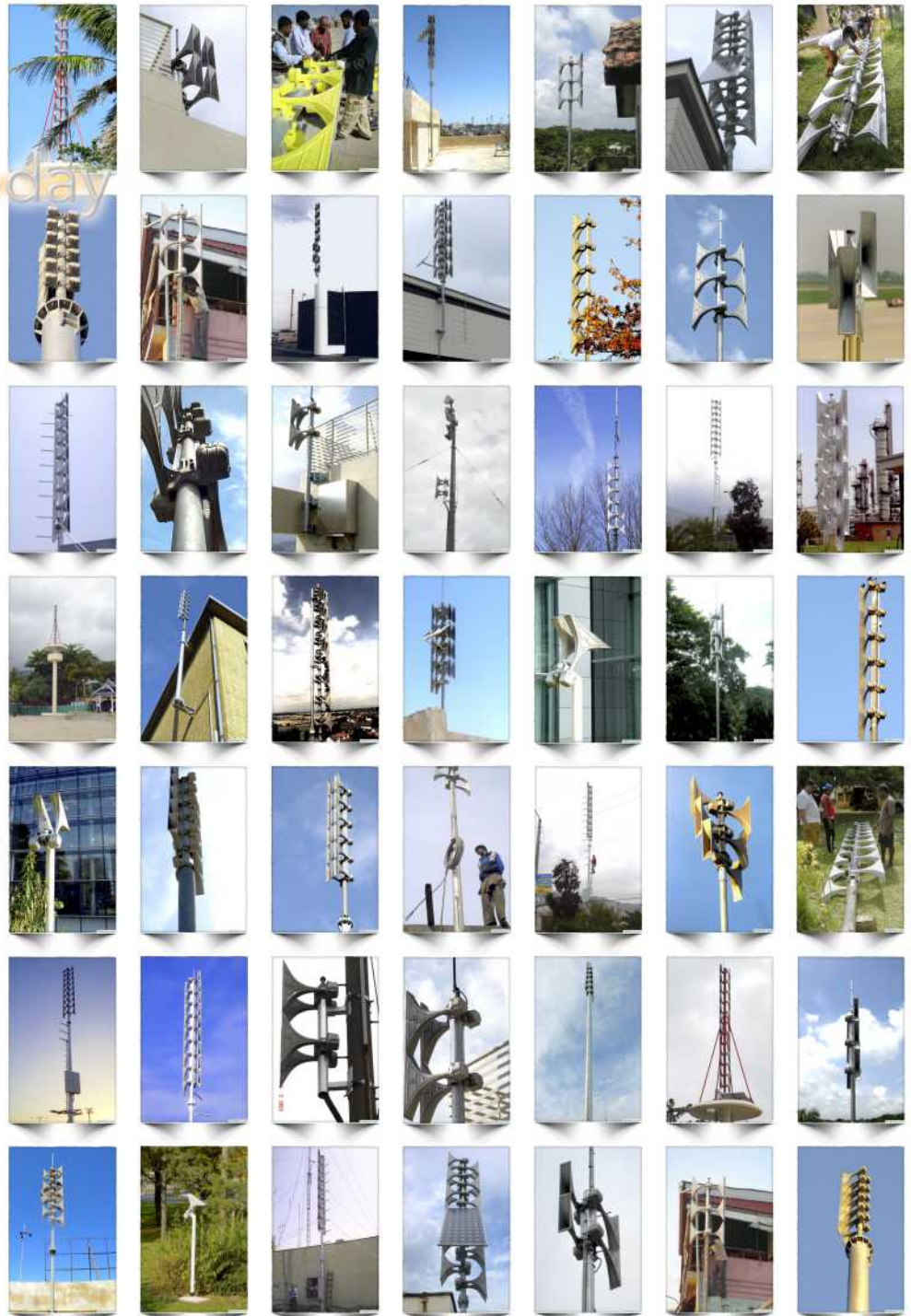


Over the years our leaders have combined **SiRcom's** culture and knowledge into what it is today - a company which brings new ideas to life.

The combination of long-time experience in advanced acoustical solutions, communication technologies, warning system designs and tailor-made complete systems is our unique competitive strength as well as your chance to a successful business.

„It is **SiRcom's** declared aim to offer a perfect economical and competitive solution for any requirement and complexity“

Today



History





# The History of Warning Technology

At the very beginning warnings and informing were spread mouth to mouth. One person told it to the other. Later on this archetype of warning and information was complemented by church bells. The noise of the bells was able to reach more public in less time. In the beginning of the 20th century the first motor driven sirens came up. By means of rotating motors howling noises were generated allowing to reach even more persons in even less time.

In the fifties the industrial sector of "warning and information" came up in Germany. Civil defence authorities and fire brigades used the sirens to inform ("wake up") their teams to come together and to warn the public about the actual danger.

In the early nineties electronic sirens entered into the market due to the limitations of the electric-motor and pneumatic sirens.

Modern industrial fields like electronics, acoustics and Information/communication technology dealt with the removal of these weak points for quite some time.

Today the technology of electronic sirens is the actually the most used standard as it withstands the main drawbacks of the outdated motor and pneumatic sirens.

Sophisticated inventions have been and will be made in order to smooth the way for new advanced warning systems.

With our TimesTower (TiTo) and the integration of Earth Quake Sensors **SiRcom** is proud to achieve new standards for highly unique turn-key-solutions



Success is not only defined by winning a contract against the competitors.

It is mainly defined by full customer satisfaction upon completion of the project.

Customer satisfaction is the most important part of the success for the company.

Since the beginning **SiRcom** successfully completed highly challenging projects may be considered as important milestones in the history of the company.

# SiRcom's world wide partners



## successful projects world wide

★Abu Dhabi	★France	★Italy	★Oman	★Singapore
★Algeria	★Germany	★Japan	★Pakistan	★Slovakia
★Australia	★Great Britain	★Jordan	★Peru	★South Korea
★Austria	★Greece	★Kongo	★Philippines	★Spain
★Bangladesh	★Haiti	★Kuwait	★Puerto Rico	★Sweden
★Chile	★Hungary	★Libya	★Qatar	★Switzerland
★Croatia	★India	★Luxembourg	★Romania	★Taiwan
★Czech Rep	★Indonesia	★Malaysia	★Saudi Arabia	★Thailand
★Dubai	★Iraq	★Maldives	★Seychelles	★Tschechien
★Egypt	★Ireland	★Moldavia	★Sierra Leonie	★USA

All this implemented projects give **SiRcom** a rich experience in cooperating with highly reliable internal and external partners securing future implementations as guaranteed success.

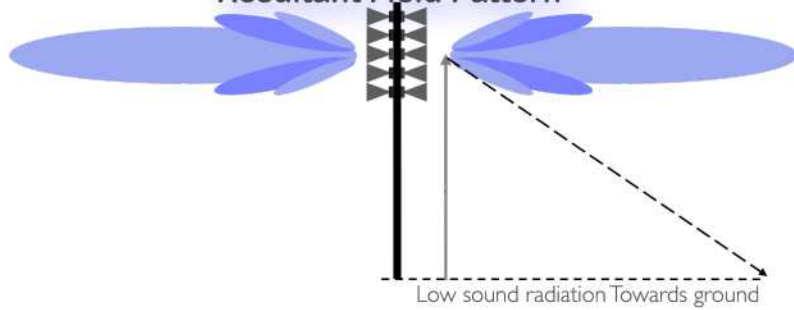
A close cooperation with our foreign subsidiaries, local representatives and agents allows to improve the chances in new markets and enables us to have direct access to potential customers all over the world.





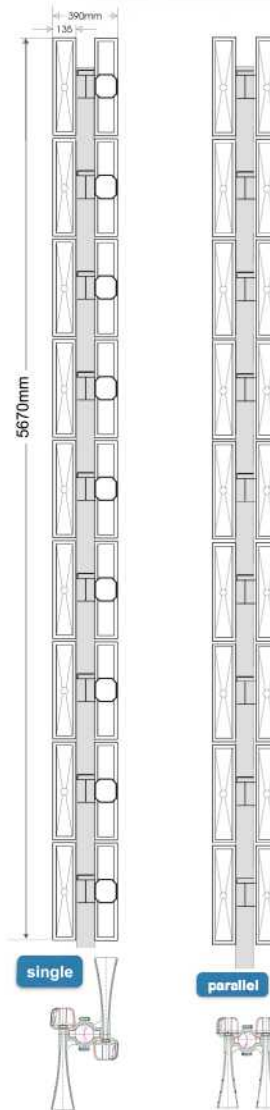
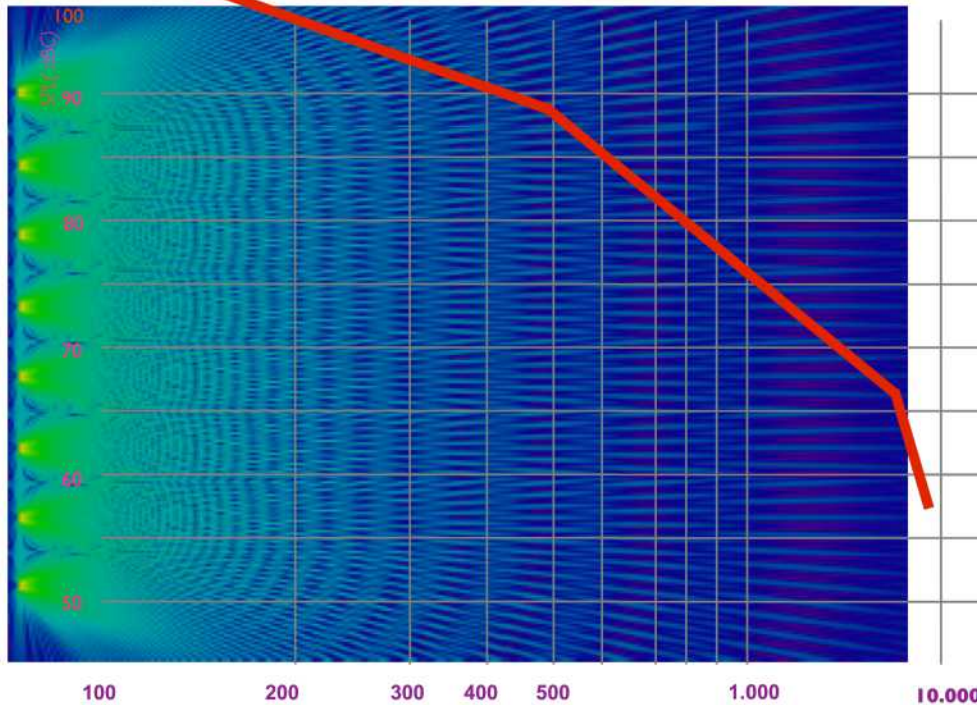
# Acoustics

Resultant Field Pattern

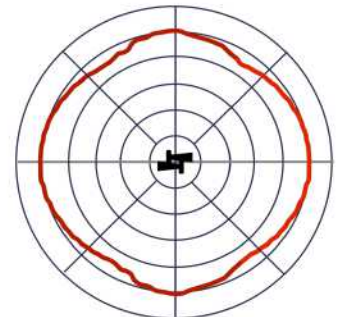


## SIREN RANGE/Coverage

Steady Tone warning signal 400 - 600 Hz  
No wind - Open area - Hard ground



Dual



Horizontal Radiation Diagram  
Omnidirectional (30m-distance)



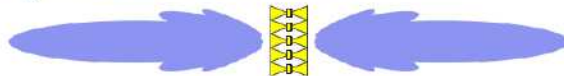
## SiBT4800 SiDES#4xl

36Horns 131dB omni

**SiRcom** Electronic Sirens using a **LINE ARRAY configuration**

Speakers produce a radiation pattern with vertical directivity

**Higher SPL** is obtained at long distances. **Less SPL** is obtained at ground level near to the siren.



portfolio  
products & solutions

## SiBT4000 SiDES#3xl

30Horns 129dB omni

## SiBT3200 SiDES#2xl

24Horns 127dB omni

## SiBT2400 SiDES#xl

18Horns 124dB omni

## SiBT1500 SiDES#L

12Horns 121dB omni

## SiBT750 SiDES#M

6Horns  
115dB omni

## SiBT500 SiDES#MS

4Horns  
109dB omni

## SiBT250 SiDES#S

2Horns  
103dB omni

With the SiBT/SiDES Series, **SiRcom** provides a well-established siren product-line which can be easily adapted to customers requirements.

Directional or omnidirectional alignment enables different sound characteristics and impacts on the environment.

Depending on the requirements, the SiBT/SiDES Series is able to provide a total output power up to **5400W** and a sound pressure level up to **131dB @ 30m**.

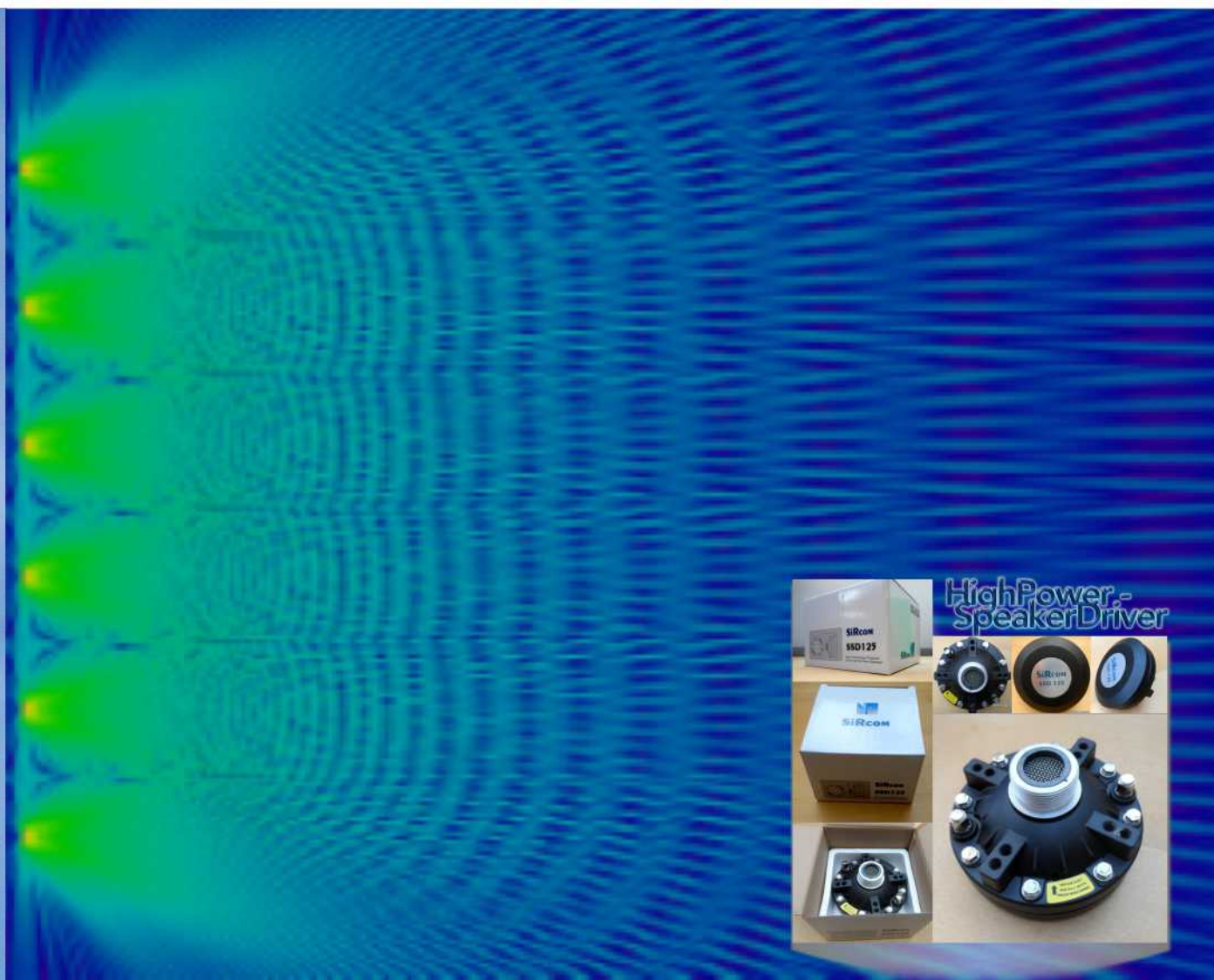
These high power electronic sirens have the capability to generate several different alarm signals and electronically stored voice messages.

**SiRcom Four in ONE Speaker-Horn for Low-Budget applications available NOW, please ask for additional Info.**





SiBT1500 directional  
124dB@30mv/100feet



High Power -  
Speaker Driver





# Horn-Sound-Distribution

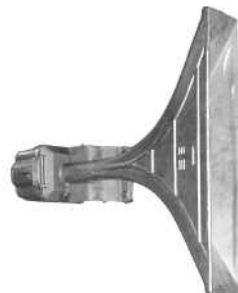
This is a computer 'plot' showing the vertical radiation pattern of an array for 6 rows in which the radiators are gaining from each other.

As all phases are synchronized, the gain reached up to 6dB each doubling sounders/power. It's a typical LINE AREA. Best performing acoustic efficiency.

Absolute highest possible sound coverage

This is a computer 'plot' showing the vertical radiation pattern of the single horn in which the radiators have been correctly spaced. The increased SPL has also Resulted in a narrow concentrated Beam of sound, perpendicular to the array.

outstanding acoustic-performance



At the beginning was the idea to design the best acoustical method for large area coverage....

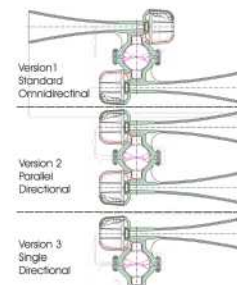
we designed the world's most efficient acoustical horn to achieve the highest possible coverage by using of the shelf high power compression drivers ...



reach the highest in area coverage....

achieve best possible Power-SPL- Efficiency .. deliver the most modern acoustic design for large area coverage ..

we made it, and it became a standard **internationally**



next, how to make it modular easy to install and maintain...

we made it, we just clamp the horn on a standard steel pole.

No flange, No hole, No welding....

must be good as others also use this method...





## Analog Amplifier

## Radio Comm.



## Digital Amplifiers



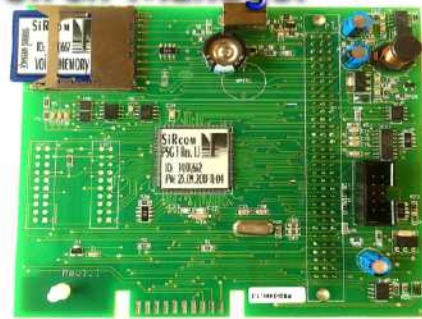
## System Control



## Solar Charger



## Siren Manager



# The SiBT/SiDES - Electronics

portfolio  
products & solutions

**The SiRcom** team invested thousands of working hours in the design and development of the state-of-the-art warning and information system technology.

Based on the longstanding experience of the team and the sophisticated products, **SiRcom** belongs to the top market leaders of the world in warning business.

The **SiBT/SiDES** Series represents the latest technology in electronic sirens that permits a significant reduction in amplifier power, number of transducers and overall loudspeaker head weight.

Sirens of the **SiBT/SiDES** Series can be easily installed on freestanding poles, on the plant structure or on top of buildings. The comparatively lightweight of the siren head does not impose a significant load on the structure of the building.

The **SiBT/SiDES** electronic siren consists of:  
The modular siren head (speaker array), the controller, housed in a steel, stainless steel or aluminum cabinet. The controller incorporates all the necessary electronics.  
A local control and test panel, communication and power supply equipment.

Finally the technical support, training, manuals, documentation and **SiRcom's** specially developed software **SiCAS** enables the user to operate very professional and in a convenient manner.

All the products used in the **SiRcom** systems are brand new and the hard- and software components are being developed and produced by our own engineering team.

They integrated their long-term experience into the products and services in order to design the latest state-of-the-art generation of Public Warning Systems as well as Communication and Information Technology.

**SiRcom** has a wide variety of turn-key-solutions for sirens combined with the latest communication and information technology.

The Product Portfolio includes: development, manufacturing, system integration and after sales service of siren systems as well as information and communication systems.



# SiCAS

Customized GUI

ZONE 1	A	1	2	3	4	5	6	7	Test Date	WDirection	38 deg
ZONE 2	B	8	9	10	11	12	13	14	Test Time	WSpeed	4.6 m/s
ZONE 3	C	15	16	17	18	19	20	21	Comms Test	Air Temp	38° C
ZONE 4	D	22	23	24	25	26	27	28	Siren Type	RH	45.6 %
ZONE 5	E	29	30	31	32	33	34	35	Siren Address	SELECT WEATHER ST	1 2 3 4
ZONE 6	F	36	37	38	39	40	41	42	Amplifiers	ESCAPE	SYSTEM STATUS
ALL	G	SILENT TEST SIREN							Drivers	28 JULY 2005	
AC Mains											
Battery Voltage											
Intrusion											
Auxiliary 1											
Auxiliary 2											

ZONE 1	A	1	2	3	4	5	6	7	ALERT (Signal 1)	WDirection	38 deg
ZONE 2	B	8	9	10	11	12	13	14	EVACUATE (Signal 2)	WSpeed	4.6 m/s
ZONE 3	C	15	16	17	18	19	20	21	Signal 3	Air Temp	38° C
ZONE 4	D	22	23	24	25	26	27	28	Signal 4	RH	45.6 %
ZONE 5	E	29	30	31	32	33	34	35	Signal 5	SELECT WEATHER ST	1 2 3 4
ZONE 6	F	36	37	38	39	40	41	42	ALL CLEAR (Signal 6)	ESCAPE	SYSTEM STATUS
ALL	G	STOP							PUBLIC ADDRESS	28 JULY 2005	
Change to MESSAGES											

TEST ALL	Siren 1	Siren 2	Siren 3	Siren 4	Siren 5	Test Date	38 (deg)
TEST SINGLE	Siren 6	Siren 7	Siren 8	Siren 9	Siren 10	Test Time	4,6 (m/s)
STATUS ALL	Siren 11	Siren 12	Siren 13	Siren 14	Siren 15	Comms Test	22,3 (deg C)
STATUS SINGLE	Siren 16	Siren 17	WE Zone 1	WE Zone 2	WE Zone 3	Siren Type	45,6 (%)
Escape	WE Zone 4	WE Zone 5	WE Zone 6	WE Zone 7	WE Zone 8	Siren address	SELECT WEATHER STATION
STOP	WE Zone 9	WE Zone 10	WE Zone 11	WE Zone 12	WE Zone 13	Amplifiers	W S S S W
SYSTEM STATUS	WE Zone 14	WE Zone 15	WE Zone 16	WE Zone 17	WE Zone 18	Drivers	1 2 3 4
28 JULY 2005	WE Zone 19	WE Zone 20				AC Mains	
						Battery Voltage	
						Intrusion	
						Auxiliary 1	
						Auxiliary 2	

Zone 1	Siren 1	Siren 2	Siren 3	Siren 4	Siren 5	MESSAGE 1	38 (deg)
Zone 2	Siren 6	Siren 7	Siren 8	Siren 9	Siren 10	MESSAGE 2	4,6 (m/s)
Zone 3	Siren 11	Siren 12	Siren 13	Siren 14	Siren 15	MESSAGE 3	22,3 (deg C)
Zone 4	Siren 16	Siren 17	WE Zone 1	WE Zone 2	WE Zone 3	MESSAGE 4	45,6 (%)
Zone 5	WE Zone 4	WE Zone 5	WE Zone 6	WE Zone 7	WE Zone 8	MESSAGE 5	SELECT WEATHER STATION
Zone 6	WE Zone 9	WE Zone 10	WE Zone 11	WE Zone 12	WE Zone 13	MESSAGE 6	W S S S W
ALL	WE Zone 14	WE Zone 15	WE Zone 16	WE Zone 17	WE Zone 18	MESSAGE 7	1 2 3 4
Escape	WE Zone 19	WE Zone 20				MESSAGE 8	
STOP						MESSAGE 9	
SYSTEM STATUS						MESSAGE 10	
28 JULY 2005						MESSAGE 11	
						MESSAGE 12	

Zone 1	Siren 1	Siren 2	Siren 3	Siren 4	Siren 5	ALARM 1	38 (deg)
Zone 2	Siren 6	Siren 7	Siren 8	Siren 9	Siren 10	ALARM 2	4,6 (m/s)
Zone 3	Siren 11	Siren 12	Siren 13	Siren 14	Siren 15	ALARM 3	22,3 (deg C)
Zone 4	Siren 16	Siren 17	WE Zone 1	WE Zone 2	WE Zone 3	ALARM 4	45,6 (%)
Zone 5	WE Zone 4	WE Zone 5	WE Zone 6	WE Zone 7	WE Zone 8	ALARM 5	SELECT WEATHER STATION
Zone 6	WE Zone 9	WE Zone 10	WE Zone 11	WE Zone 12	WE Zone 13	ALARM 6	W S S S W
ALL	WE Zone 14	WE Zone 15	WE Zone 16	WE Zone 17	WE Zone 18	ALARM 7	1 2 3 4
Escape	WE Zone 19	WE Zone 20				ALARM 8	
STOP						ALARM 9	
SYSTEM STATUS						ALARM 10	
28 JULY 2005						ALARM 11	
						ALARM 12	

## Tablet

LOG IN 1.2

**SiRcom**

SPEECH ACTIVATION

Intrusion	Close Gates
All Clear	Tornado Watch
Evacuation Drill	Tornado Warning
Exercise Gas	Emergency
Enter Area	
Confirmation	STOP

SiCAS14

SiRcom

MAINTENANCE

TEST

STATUS

LOG-FILE

SOLAR 1

SOLAR 2

Progress SOLAR PANEL STATUS

CANCEL

SiCAS14

SiRcom

MAINTENANCE

TEST

STATUS

LOG-FILE

SOLAR 1

SOLAR 2

Progress SOLAR PANEL STATUS

CANCEL

ALARMS

EVACUATION

ALL CLEAR

EMERGENCY

EMERGENCY

EMERGENCY

EMERGENCY

EMERGENCY

VOICE MESSAGES

EVACUATION

ALL CLEAR

EMERGENCY

VOICE MSG 4

VOICE MSG 5



## SOFTWARE-Performance

The Control and Management Software **SiCAS** is designed to allow one or several user(s) on remote control by the highest possible security for any siren-function within any communication structure.

It is our absolute priority to secure high flexibility without risking failures and any malfunction.

At any time the alarm-activation has highest priority. Showing the operator the system-performance as well any technical status of each siren within a System.

The **SiCAS-SW** can be used as a single application as well as multi-centre-architecture with a priority- hierarchy.

Monitoring the siren-functionality is a permanent task. Reporting to the control centre can be done automatically or on request.

**SiRcom** offers to customize the Control-Application as well, the Screen-Designs as per customer needs.

The MAIN-Features of **SiCAS** are:

- Touch Screen / Panel-PC - Operation
- Secure Access Control by:  
USB-Stick or Chip-Card with controlled Access Data and Pass-Word
- Log-File documentation of any activity
- MAP-GUI sirens on geographical maps with active functional indication.
- Customized screens of any functional button
- Customized language (control by USB-Stick)
- Customized functional features
- Remote VPN-System-Support
- Operating-Systems available, Windows / Apple OSX, iOS / Linux / Unix
- Apple iPad- & iPhone,- Android - Control

**SiRcom** offers Interface to any existing communication means via IP



# KEY Features of any SiRcom Systems

portfolio  
products & solutions

## **Control Station**

All the sirens can be controlled from one or many control stations, as individual, as group, and all together.

## **Selected Sirens**

Any number of sirens (units) can be activated at any given time from the control station (group-activation)

## **Auto Reporting**

After activation a feed back message will be received in the control station that the alarm has been activated and is running.

## **Status of Equipment**

Through the control station the status of all the functions/ performance of the equipment like mains, batteries, amplifiers, drivers etc in less than 60 seconds will be provided.

## **No False Alarm**

Through CONTROL DATA SECURITY(Dual-Command-Time-Control) SiRcom can guarantee that false alarm can never be triggered.

## **Power Supply**

through SOLAR PANELS. SiRcom-Sirens made with high efficient low consumption-design allows a supply and charging the batteries through off the shelf SOLAR PANELS.

## **Command & Communication**

Wireless communication through VHF,UHF, GSM/GPRS / UMTS, WiFi and Satellite.

Line based communication by telephone link, IP, RS485 or any other local infrastructure can be used.

## **Safety against Lightning & Thunder Storms**

As SiRcom siren head is made out of aluminum, our whole equipment is safely-covered (Faraday effect, siren-head has fully ground potential). Once the siren head is grounded properly any lightning-current runs direct into the earth/ground.

## **Warning Signals & Messages**

Any number can be created. Any number of voice messages can be stored.

## **Minimum Maintenance Visits**

Maintenance visits are minimized by the remote status monitoring feature.

## **Bi-Directional Communication**

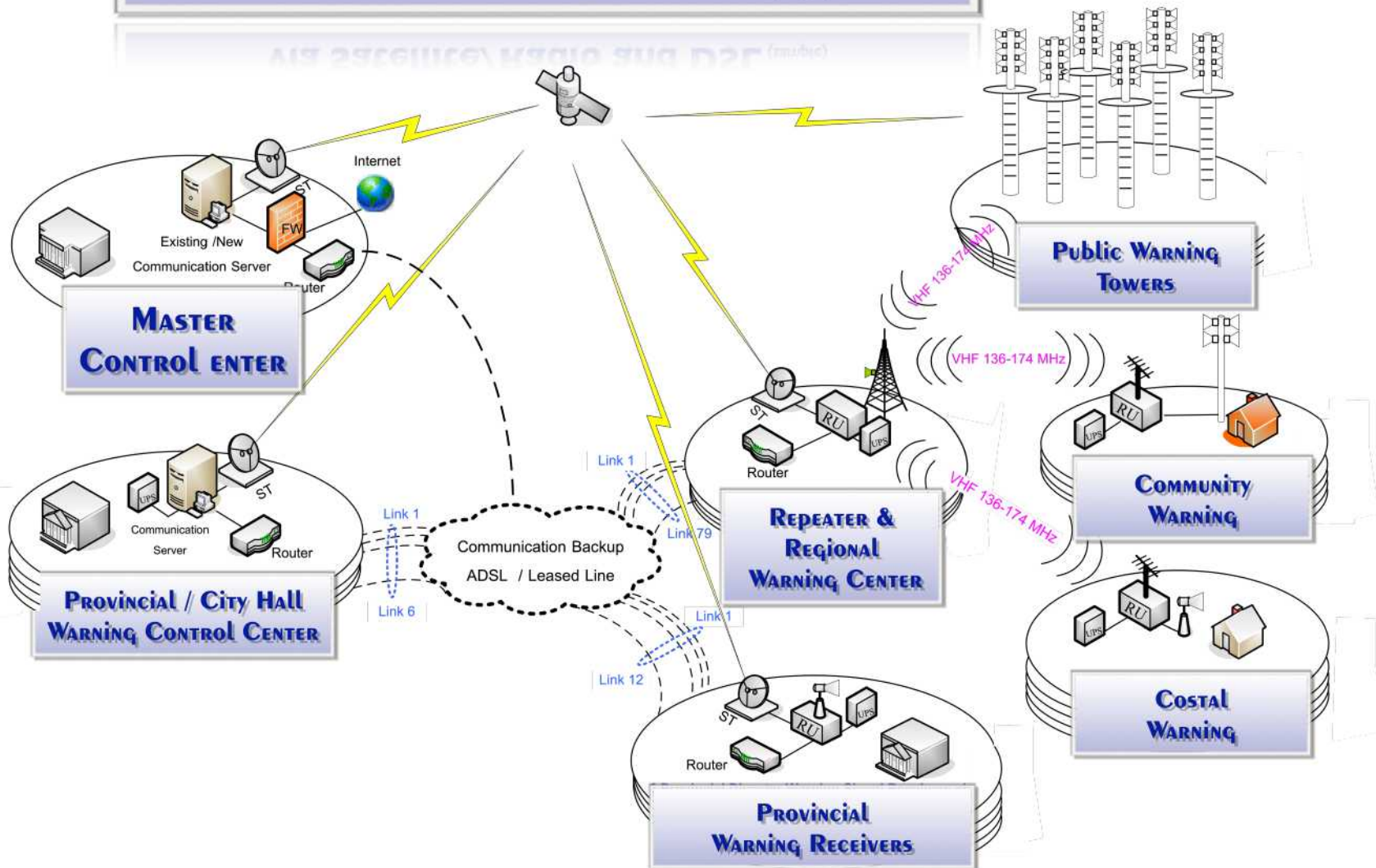
A bi-directional communication between control station and sirens gives the status of the communication and state of the equipment in real-time.

## **Siren Silent Testing**

The sirens are tested by using the normal output power with a high frequency where it generates no Sound Pressure Level but gives a real measuring value controlled from and to the control station.



# SiRCOM Nation wide Siren Control Solution via Satellite/Radio and DSL (sample)



# customized solution

## TAILORED Communication & Control System

The Communication Solution is depending on the available infrastructure, operational requirements and overall system structure needs.

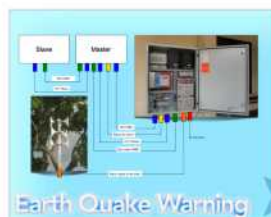
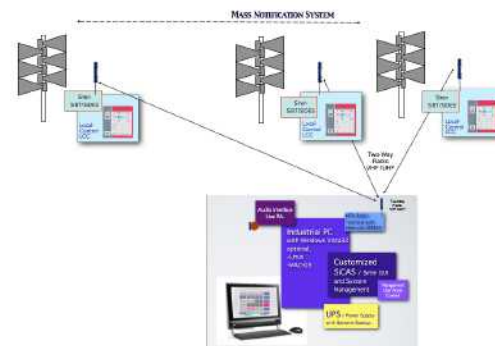
**SiRcom** offers customized solutions for any available line- or wireless-based infrastructure.

From a single Control Room for a local siren control up to nation-wide multi-path communication by different means can be implemented.

Today's highly available data-services allow a wide range of operational features where **SiRcom** takes care of it's availability and data security to ensure secure siren-control and performance at any time and under any circumstances.

Knowing that the system is in perfect condition at stand-by or in-operation is our aim.

## portfolio products & solutions



## TAILORED Communication & Control System

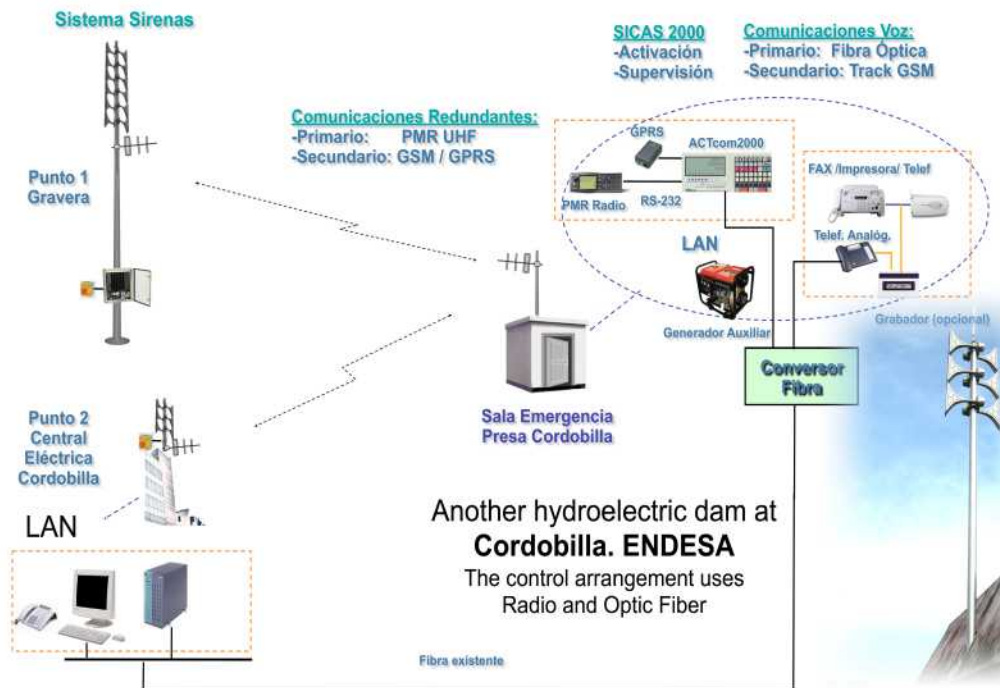


**SiRcom**  
customized solution





## Plan Emergencia Cordobilla





## FLOOD Warning & DAM Implementation

portfolio  
products & solutions

Since 2005 **SiRcom** implements highly complex Dam-Warning-Systems with:

- Multi-Central-Control
- Multi-Communication-Technologies
- Multi-Dam-Sites-Installations

For Flood Warning it is essential to reach the public in danger within appropriate time-frame.

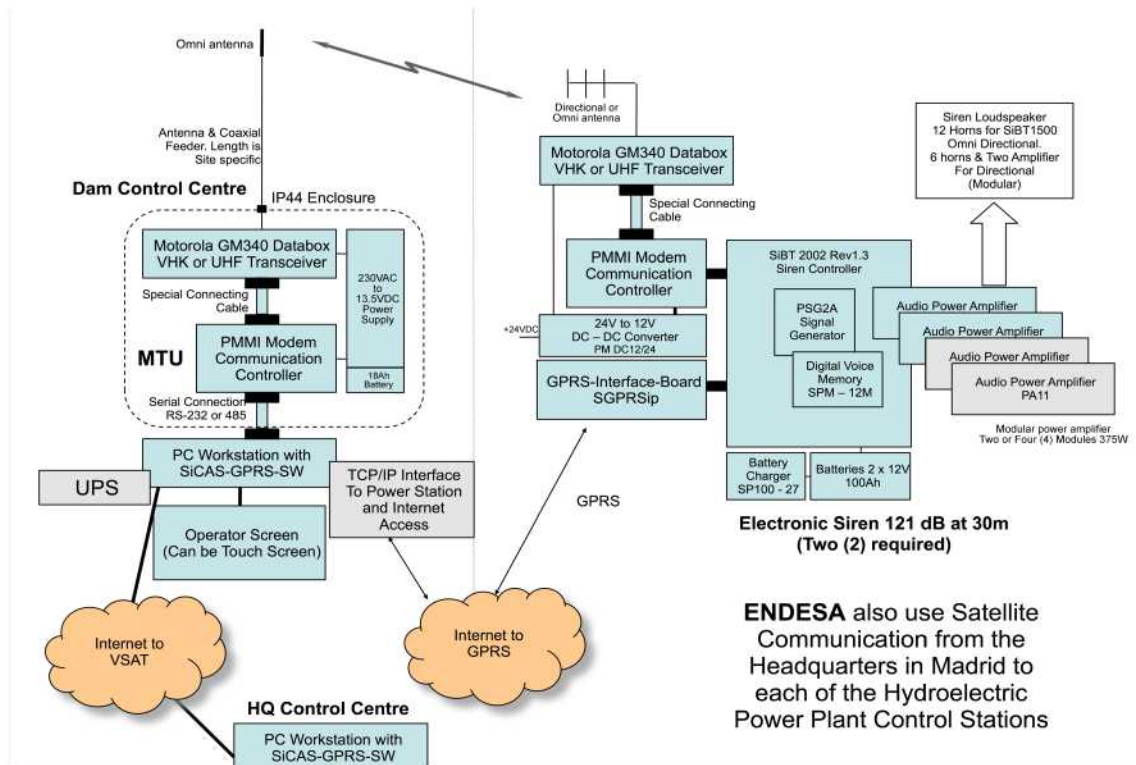
It can be within minutes or within hours.

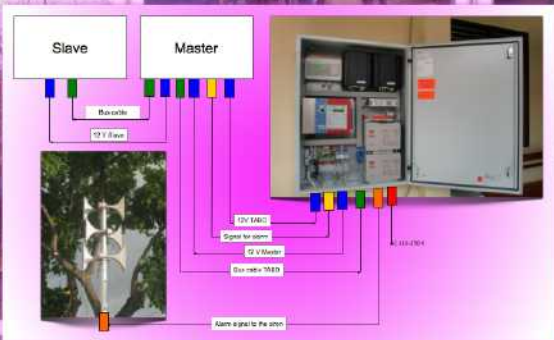
Such a system needs a secure and redundant communication structure plus a highly reliable acoustic coverage.

Siren-installtions at Rivers or rurale areas are to be monitored and tested on realtime basis.

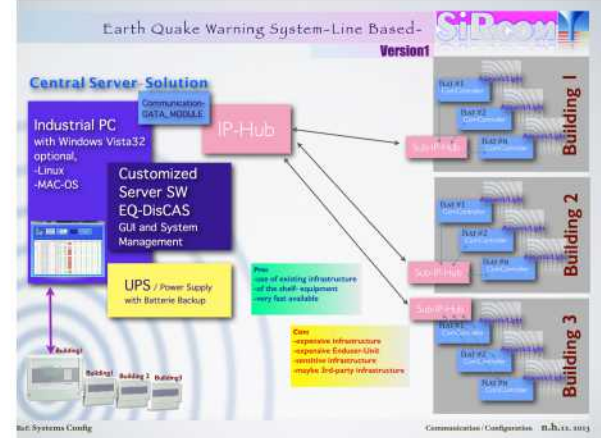
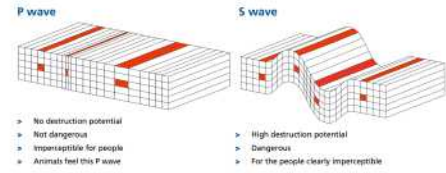
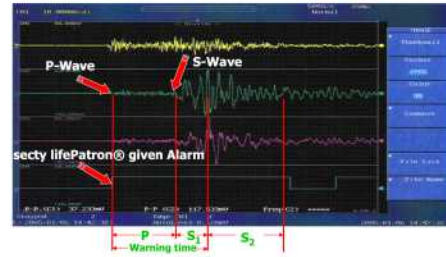
**SiRcom** has plenty of experience in Emergency Warnings & communication solutions.

Contact us for your requirements.





Earthquake: Turkey, Nov.1999,  $M_g=7.2$





## Earth Quake Warning

portfolio  
products & solutions

During the past few decades, human casualties and economic loss due to natural disasters have increased exponentially mainly because of the increased density of population in high hazard areas.

Although the prediction of earthquakes is not practicable yet, the technology developed by us allows a prompt identification of the onset of any dangerous seismic event before it hits an urban area.

Advanced Earthquake Warning System can provide an alert in advance.

The lead time may be used to minimize loss of lives, property damage and to help quick emergency response.

The lead time allows the public to reach safe areas to protect their lives.

We have developed an equipment for Rapid Detection and Instant Emergency Warning of an impending Earthquake of a fatal intensity.

# time is LIVE

### Warning Time;

The system is designed to identify the harmless seismic waves that precede the destructive force of an earthquake and provide enough warning time to shut down vulnerable facilities.

The amount of warning time depends on how far from an earthquake you are.

<b>40 km distance from the Epicenter</b>	<b>8-12secs</b>
<b>80 km distance from the Epicenter</b>	<b>16-24 secs</b>
<b>120 km distance from the Epicenter</b>	<b>24-36 secs</b>
<b>160 km distance from the Epicenter</b>	<b>32-48 secs</b>

### Every second counts

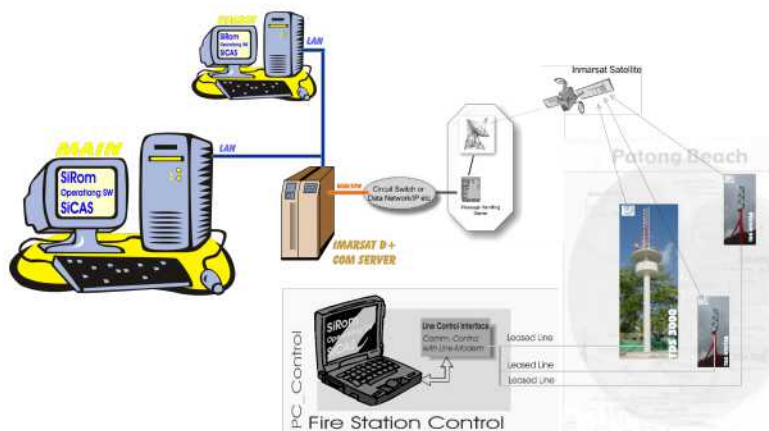
The period between the alarm and the actually perceptible, destructive earthquake usually is no more than a few seconds. This depends on the distance between the location of **secky lifePatron®** and the epicenter of the earthquake. The depth of origin of the tremor and the state of the geological formation play a role, too.

At the real **Chilene** earthquake from 02-27-2010 the advanced earthquake early warning time in Santiago de Chile was 30 seconds.

**30 seconds that may save your life!**







## TSUNAMI Warning

portfolio  
products & solutions

As the horror of the devastating tsunami of 26 December 2004 unfolded, the world was shocked to learn that if Tsunami Early Warning Systems had been in place in the region, many thousands of lives could have been saved.

The latest spate of devastating disasters, like Asian Tsunami of 2004, the Myanmar Cyclone of 2008 or China's Earthquake of 2008 have renewed the focus on setting up Early Warning Systems on priority basis.

One of the most important task of the Governments in Disaster and Risk Management is to take preventive measures to minimize the loss of life and property at the time of Natural and Man- made Disasters and Emergencies. Due to Global warming, Natural Calamities are increasing. Industrial Accidents too occur time to time, and other human induced disasters such as terrorism acts do take place, creating nightmare for the humanity. On any of such occasions public must be informed well in time to protect human life , property and environment.

Civil Defense starts with carefully considered Warning and Notification System. Advanced technology provides a wide range of Warning Systems from conventional Outdoor Sirens to complex integrated state-of-the-art Warning and Notification Systems.

The new communication and information technologies that have emerged over the last two decades have lead to greater possibilities of integration with Early Warning Systems. As a result, the possibilities for application of communication technologies and Early Warning Systems in mitigation and prevention of disasters are also increasing. The context of early warning system communications has two aspects; the hardware aspect relates to communication infrastructure and the software aspect relates to the maintenance of relationships among the stakeholders involved in the early warning communication chain.

The lack of clear and straightforward information, when confronted with the reality of a disaster and conflicting news or rumors, can confuse people and undermine their confidence in public offices. Clear and balanced information is very critical part of alert notification.

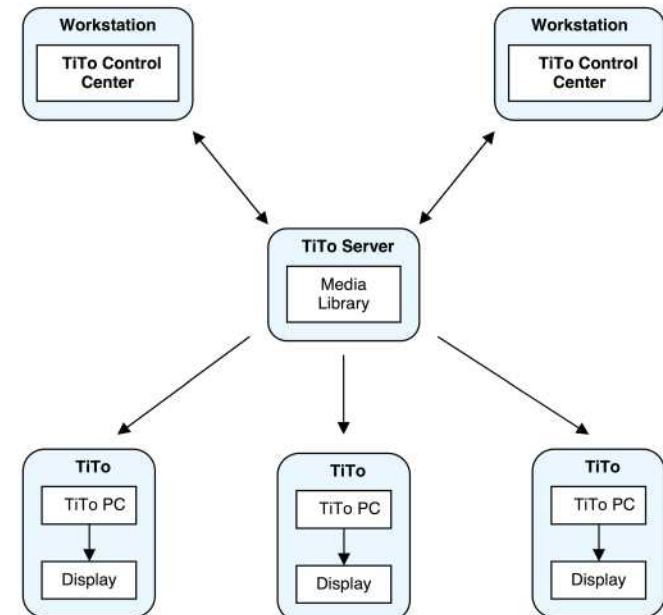
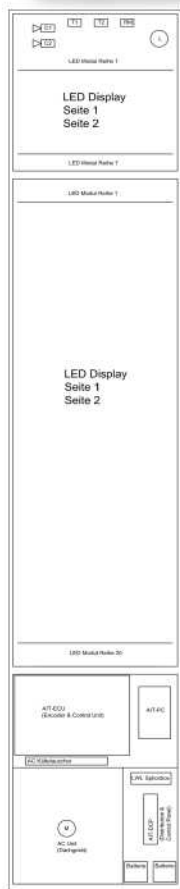
Every inhabited area vulnerable to Natural or Man-made disasters requires a tailor made solution adapted to local conditions/requirements. With a suitable Warning system in place the Governments can inform public well in time of any impending disaster.

Independent from Public Utilities and reliance solely on Outdoor Warning & Notification System's own power supply (Solar) and Communication links mean that such systems need to be monitored periodically to ensure their smooth functioning during any eventuality. Therefore it is imperative that detailed routine diagnostic procedures are incorporated in the System Design.

For standalone units such information can be obtained from the Control Cabinets at installation locations. And for System Units such information can be obtained from Main Control Station.

A modern Outdoor Warning & Notification System consists of a Computer supported Main Control Station, Communication network (Radio, GSM or Satellite) and Electronic Sirens of various Acoustic Output Powers. A Radio Signal with data and voice is transmitted from Main Control Station to Electronic Sirens activating alert signals, pre-stored messages and live broadcasts. Through Radio Signal from Electronic Sirens to Main Control Station siren activation status message is transmitted (two way communication). Although the systems are continually operated for monitoring, testing and activation, yet they are cost efficient and require minimum maintenance.







# customized solution

## TIMES TOWER TiTo

portfolio  
products & solutions

Today's Technologies allow a NEW-Version of Public Information.

The LED-Display-Technology makes it possible to install very large Displays on the streets or in Public-Areas in order to inform Public and highly populated areas in case of any emergency by;

-using the Screens for Visual Information  
-by using an integrated P.A. System for announcements.

-by using integrated communication-network to trigger personal mobile equipment.

The latest Design of New-Version of Public Information is the **SiRcom's** TimesTower (TiTo) solution.

It includes all above mentioned features.

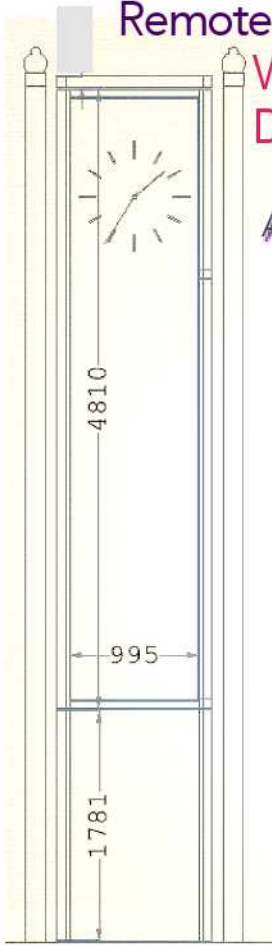
In Standby Mode it can be used as a standard Public-Information-Display as well as a revenue source by selling Display time to the advertisers.

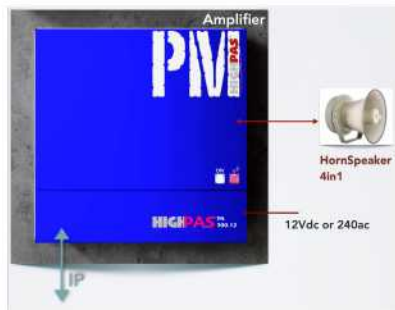
All such features are simply controlled via IP from a Control-Center in real-time.

### Remote Controlled Surveillance, Information, Warning and Broadcasting Towers with Digital Advertisement LED Display

#### Advertising- & Security-Applications

- \*Full Color LED Display (any size)
- \*Video Surveillance
- \*License Plate Recognition (LPR)
- \*Red Light Violation
- \*Speed Monitoring
- \*Emergency Warning
- \*Public Address
- \*Environmental Sensors
- \*WiFi-Hub
- \*3G/4G-Hub
- \*customized solution





# customized solution

## INdoor-Siren MessageBox

portfolio  
products & solutions

Where sirens are an excellent solution to reach public in case of warning, our **MessageBOX** is the equivalent for INdoor applications.

In case the Siren-Acoustics is insufficient to enter Buildings the **MessageBOX** will secure warning reaching INdoor all the people in public areas like: shopping malls, government buildings, hospitals, hotels, etc.

The **MessageBOX** is designed to make maximum use of existing INdoor P.A.-Systems plus it is fully integrated into the centrally controlled Public-Warning System.

### The **MessageBoX**

is a powerful Mass-Notification unit for any Warning or P.A. applications. used as:

- Siren
- P.A. Speaker-System
- Stored Message Player

connected via:

IP/DSL/WiFi/WiMAX  
Radio/TETRA/3G/GSM  
or any line-based communication.

It can be supplied by:

mains /solar/12Vdc / 24Vdc  
secured by a battery backup.

Consisting of a 6 Chanel Digital Audio Amplifier with Sound Control and communication interfaces.

The Modular-Design allows extensions for any requirement.

## BOS! THE IDEA

### COMBINE SINGLE COMPONENTS TO A UNIQUE HIGHLY INTEGRATED ONE-UNIT-DESIGN

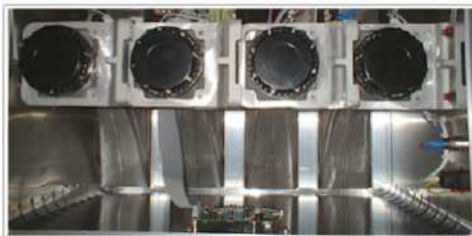
The **BASICS** are consisting of:

- Digital Sound Generator
- Audio-File-Storage
- Live P.A.
- System Management
- Power Management
- IP Audio to Amplifier
- Remote Control and Monitoring by IP

The **EXTENSIONS** are consisting of:

- 3G/4G control
- Digital Radio control
- WiFi / WiMAX / Bluetooth Control
- RS 232 / 485 Control





# customized solution

## MOBILE-SirenInTheBOX

portfolio  
products & solutions

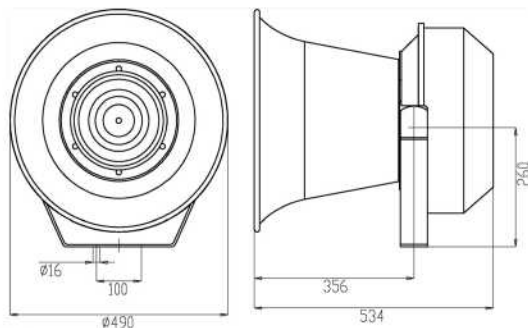
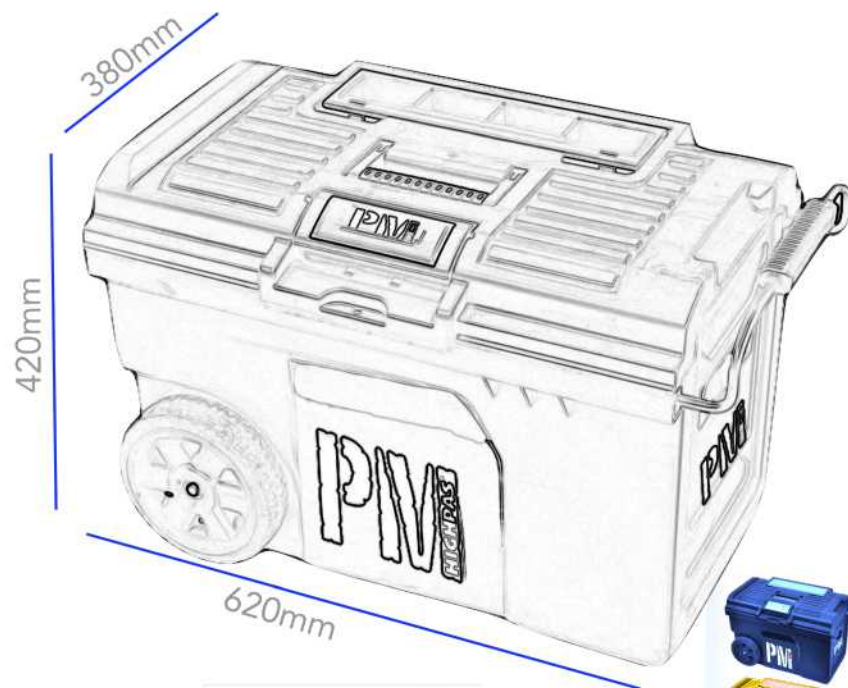
### The **SirenInTheBOX**

is designed for any mobile or temporary application where HIGH-Power-Acoustic-Coverage is required during emergency or public activity in populated areas.

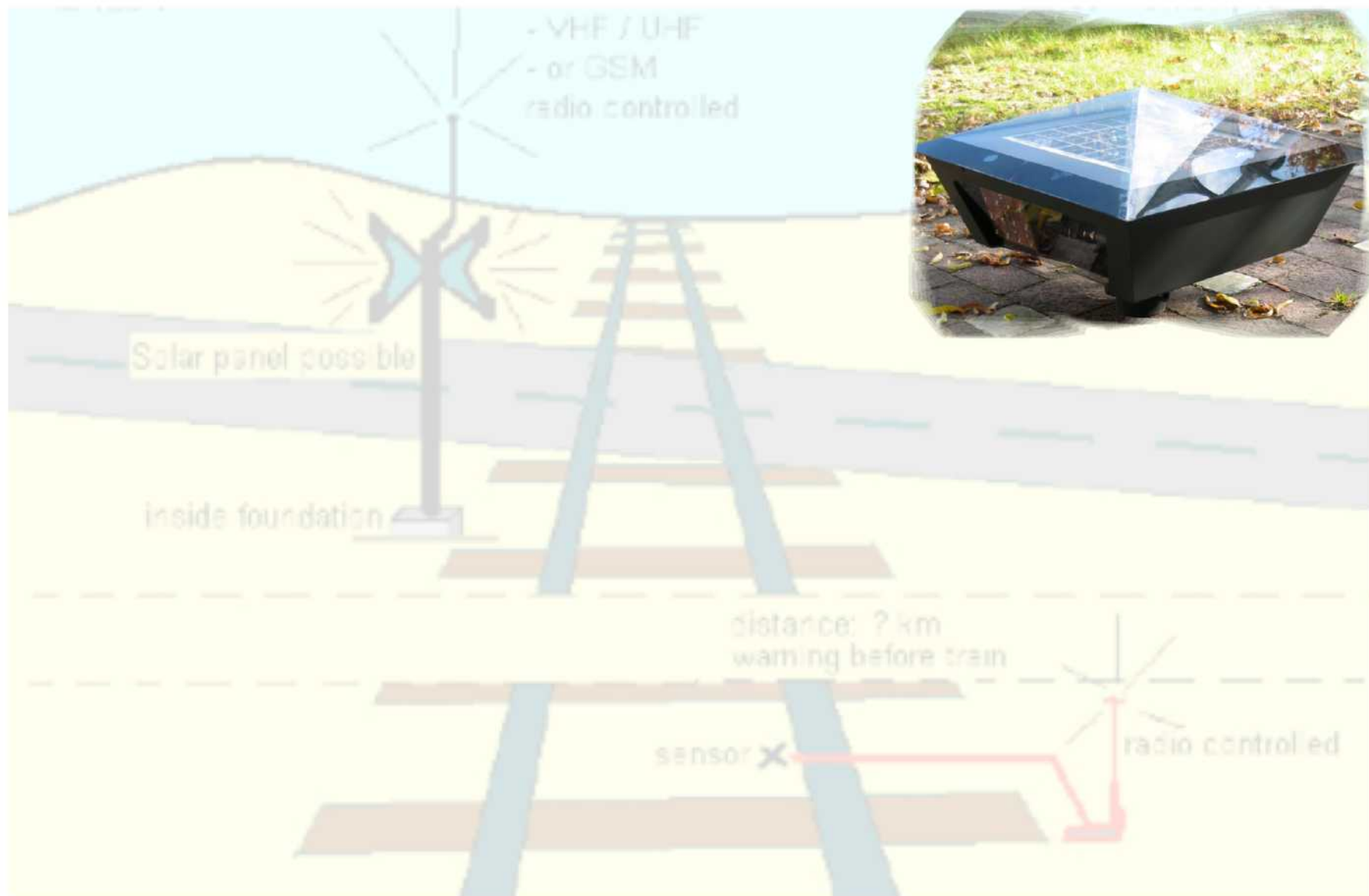
**SirenInTheBOX** is generating a sound pressure level of 150dB@1m so that it can easily reach 500m distance by giving very clear announcements or warning in order to address people in the area.

It is self-powered and can be setup within a few minutes at any place.

An RF-Microphone gives a wide range of independence from the setup.







## Level Crossing Alarm

Where unmanned Train-Crossings are a huge danger for public traffic **SiRcom** offers an automatic alarm solution.

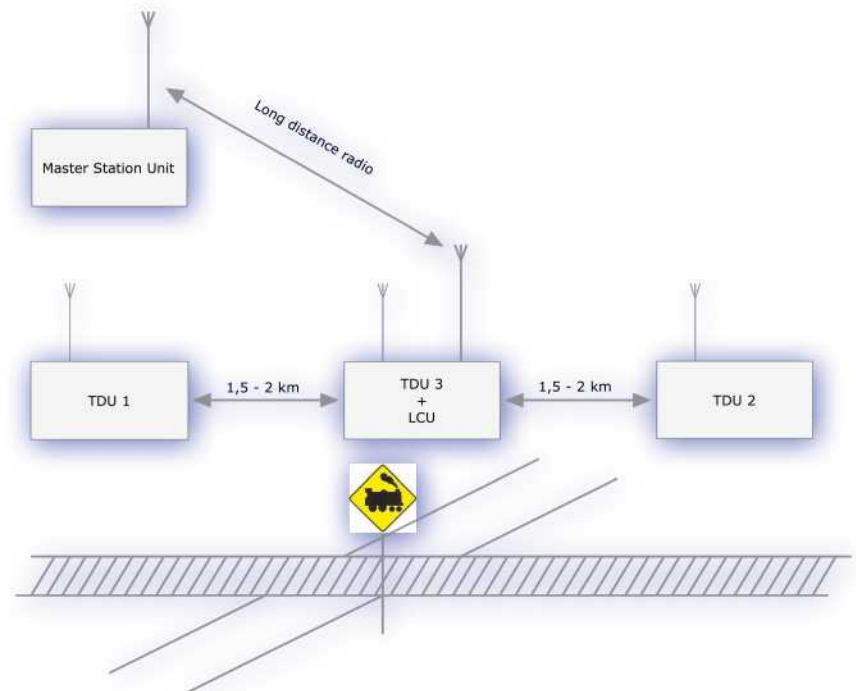
The **Level Crossing Alarm** gives automatically warning to the traffic on crossings in realtime prior to crossing of a train.

A monitoring-unit detects the moving train at a distance of few hundred meters distance.

The detection is send to the next crossing and the warning is given realtime to the public within a reasonable time frame to move out of the crossing.

This fully Dynamic realtime control provides very accurate warning to the crossing. The public will appreciate and accept as it doesn't waste much of their time.

All the equipment is Solar-Supplied with Battery-Backup and mounted on high poles using royalty-free Radio-communication.







# customized solution

## REPELLANT... saving Bird's life portfolio products & solutions

Architectural design sometimes has deadly consequences for the nature like experienced by a modern Building for the car manufacturer VW in Dresden Germany.

The fully Glass-Design of the Car-manufacturer became a risky area for birds who discovered such glass facade too late and got killed by flying into them.

The Government requested to printing the Glass facade to prevent the birds flying into the building.

Avoiding such printing and change of architectural design **SiRcom** in cooperation with Munich University offered a acoustical solution keeping birds away from flying into the Glas-Front.

Implementing a virtual-bird-area by specifically recorded bird sound cautioning the birds in the area that this place is already occupied and since many years this solution is working perfectly.

The rate of bird-accidents are reduce by >80%

where Birds get killed by flying  
into windows **ACOUSTICS**  
can help to keep them away  
from flying into windows...



...a very green approach



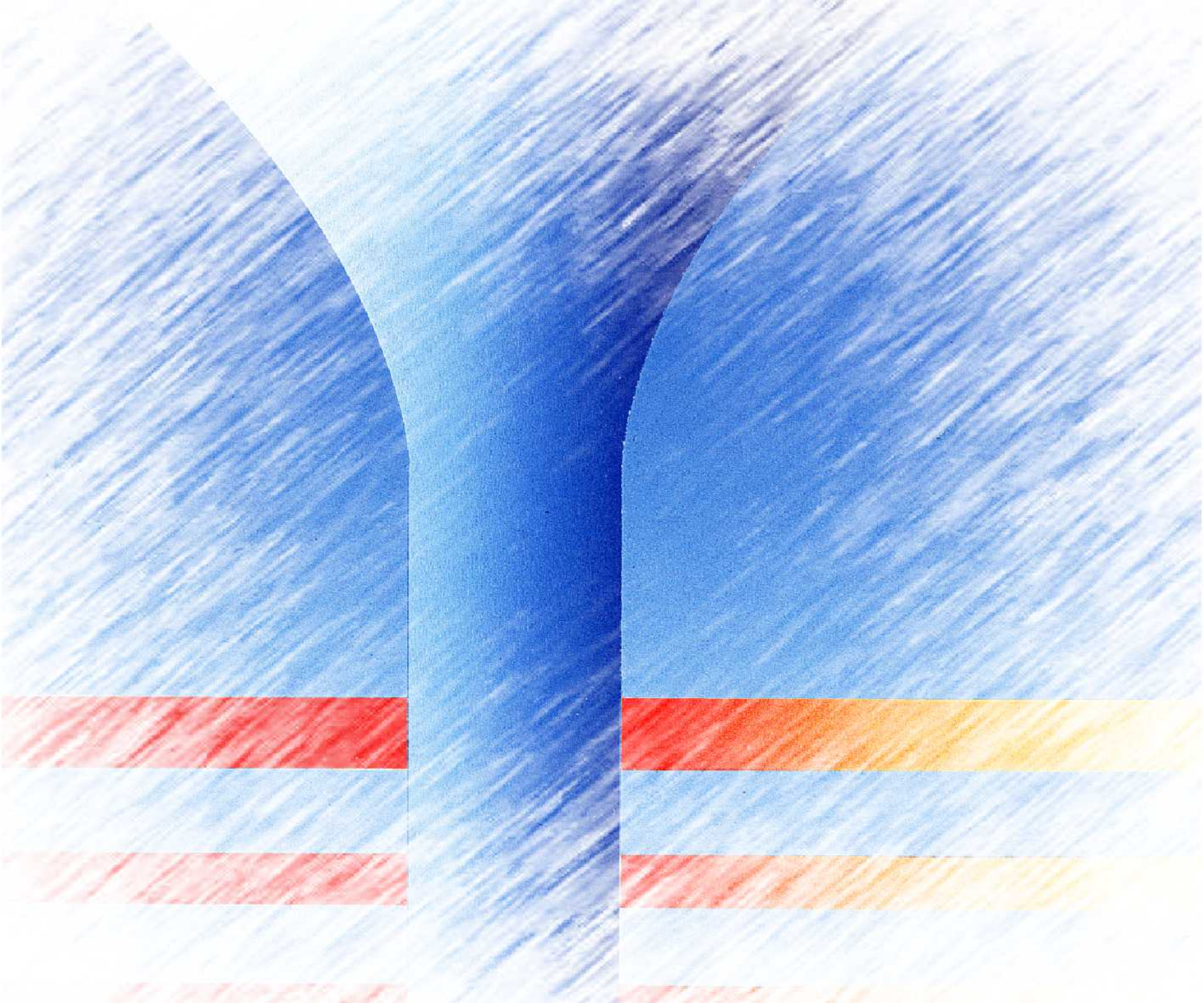


# Customers/References



**1993** Refinery **Singapore**, **1994** C.D. **Croatia**, C.D. **Sweden**, Hydro Power **Croatia** **1995** C.D. **Croatia**, C.D. **Czech Republic** **1996** chemical plant **Croatia**, chemical plant **Qatar**, chemical plant **Germany**, military bases **Algeria** **1997** nuclear power plant **Slovakia**, chemical plant **Germany**, chemical plant **Qatar**, C.D. **Sweden** **1998** chemical plant **Germany**, nuclear power plant **Czech Republic**, chemical plant **Germany**, C.D. **Sweden**, City of **Innsbruck**, City of **Meran** **1999** chemical plant **Germany**, chemical plant **Qatar**, chemical plant **Saudi Arabia** **2000** nuclear power plant **Hungary**, chemical-park **Austria** **2001** chemical plant **Qatar**, steel factory **UK**, chemical plant **Czech Rep.**, C.D. **Taiwan**, C.D. **Luxembourg**, golf course **Singapore** **2002** chemical plant **Germany** **2003** coffee factory **Germany**, chemical plant **Qatar**, chemical plant1 **France**, chemical plant2 **France**, refinery **UK**, C.D. **Kuwait**, birds live **Dresden** **2004** refinery **Ireland**, chemical plant **Germany** **2005** refinery **Kuwait**, C.D. **Liechtenstein**, tsunami-warning **Thailand**, tsunami-warning **Chile**, military bases **IRAQ** **2006** refinery **Kuwait**, military bases **US-Army**, C.D. **Taiwan** **2007** Hydro Power **Spain**, oem **USA**, golf course **Singapore**, C.D. **Taiwan** **2008** Hydro Power **Spain**, oem **USA**, golf course **Singapore** **2009** Hydro Power **Spain**, oem **USA**, golf course **Singapore** **2010** Hydro Power **Spain**, military bases **US-Army**, oem **USA**, golf course **Singapore**, earth-quake-warning **Haiti** **2011** refinery **Kuwait**, Hydro Power **Spain**, tsunami-warning **Indonesia**, oem **USA**, C.D. **Taiwan**, flood warning **Bangladesh**, earth-quake warning **Pakistan**, C.D. **Libya** **2012** refinery **Kuwait**, Hydro Power, oem **USA**, flood warning **Sierra Leone**, tsunami-warning **Indonesia**, earth-quake-warning **Indonesia** **2013** Hydro Power **Spain**, tsunami-warning **Indonesia**, oem **USA**, earth-quake-warning **PERU**, earth-quake-warning **Moldavia** **2014** refinery **KNPC Kuwait**, **QVC Qatar**, tsunami-warning **Indonesia**, flood-warning **Australia** **2015** Dam- **India**, tsunami-warning **Indonesia**, flood-warning **Philipiens.....**







contact us:

# SiRcom

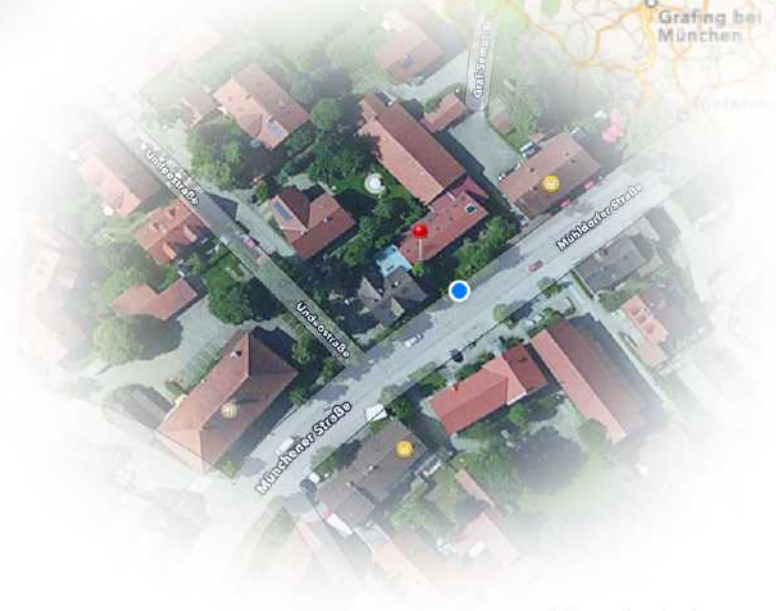
GESELLSCHAFT FÜR SYSTEMINTEGRATION  
& KOMMUNIKATIONSTECHNIK mbH

MÜHLDORFER STRASSE 1  
85661 FORSTINNING  
GERMANY

TEL. +49 8121 9194-0  
FAX +49 8121 9194-10

[www.sircom.de](http://www.sircom.de)  
[info@sircom.de](mailto:info@sircom.de)

visit us:





**PUBLIC** warning

you need further Informations? please ask....



# SiRcom

