A-WARN | iKAS

PUBLIC ALERT AND WARNING SIREN SYSTEM
#Transportation

FAST & RELIABLE WARNING SYSTEM IN DISASTER & EMERGENCY SITUATIONS
BROADCASTING WARNING MESSAGES AND LIVE ANNOUNCEMENTS
SECURE COMMUNICATION VIA JEMUS INFRASTRUCTURE
GENERATING SPECIAL WARNING SIGNALS THROUGH COMMAND CENTERS

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PUBLIC ALERT AND WARNING SIREN SYSTEM

a-WARN İKAS is a Public Alert and Warning Siren System designed and manufactured by ASELSAN, which can be controlled from a single center in order to warn the public in the fastest way in all kinds of disasters, emergencies, dangers and civil defense situations, as well as to increase awareness of the specified situations with different kinds of notification signals, pre-recorded messages or live announcements.

The system can be activated and controlled from both Control Center or local siren unit on the field. In addition to activation of pre-recorded signal and alert audio files, it is possible to perform live announcements.

- The software running on siren units and Siren Monitoring and Control Software which is used in command centers has also been developed by ASELSAN.

- The secured connection between the Command Centers and Siren Units on the field is provided by ASELSAN's APCO-25 "JEMUS" encrypted radio infrastructure. In addition to that GSM/4G/Fiber/Ethernet communication channels can also be used for system communication.

System Architecture

The system can be monitored and controlled from Main Command Center (MCC). In case of destruction of MCC, Secondary Command Center (SCC) get activated automatically and take on all authorization of MCC.

The system is also capable of being triggered by third party software such as State Disaster Management Software.

In addition to Siren Units, a-WARN İKAS has YSSM (3rd party announcement system) units which can be integrated to existing PA systems so that it can broadcast warning and alarm signals through existing 3rd party systems in order to maximize coverage.

Standards

- Acoustic chamber 115 dB(C) (@30mt.) sound pressure level certification (ISO/TS 13472-2)
- IP 65 protection class for siren cabinet (EN 60529:1997)
- -25 ºC / +55 ºC operating temperature for siren cabinet (EN 60068-2-1:2009 / EN 60068-2-2:2008)
- -40 ºC / +60 ºC operating temperature for siren speakers (EN 60068-2-1:2009 / EN 60068-2-2:2008)
- EN IEC 60068-2-52/method-4 salt mist corrosion test
- EN 55035:2017/A11:2020, EN55032:2015/A1:2020, EN IEC 62368-1:2020 LVD & EMC test standard.
- ISO 7240-19 standard STI intelligibility index:
  – 0.85 (Excellent) at 300 meters
  – 0.74 (Good) at 500 meters
  – 0.68 (Good) at 700 meters

Technology & Capabilities

- Broadcasting & pre-recorded messages & live announcements
- Scheduled alarms & 7/24 remote monitoring & control
- Automatic silent self-test diagnosis
- Incident monitoring & reporting & advanced log mechanism
- Multi-layer authorization and access management
- AES 128-byte enc. between control center & ciren units
- Time synchronization & GIS interface
- Training and exercise (drill) modes
- Mp3-wav audio files support
- Add/remove/update siren units over command centers
- Specific warning signal generation over command centers
- Overtemperature, power & status information
- Independent adjustment and control of each siren speakers
- 7" LCD touch screen for local control of siren units
- Maintenance-oriented special cabinet (wiring)
- Sound level adjustment between 70dB-115dB in ±3 dB steps
- Efficient power consumption for stand-by (<20watt)
- 2x12V/100AH GEL type battery
- Battery protection unit (24V/100A) for battery group
- PV solar energy system with MPPT (75V/15A) solar charge
- 230VAC/16A AC charge controller
- At least 5 days stand-by time without external power supply
- At least 30 min. continuous alarming without external power
- Class-D digital amplifier for each siren horn
- 19" 3U EURORACK chassis for control and amplifier boards
- Available interfaces: RS232, ethernet, serial, usb, HDMI

Auxiliary Systems & Optional Features

- Radio/GSM/fiber/ethernet communication infrastructure
- Mounting equipment (roof/pole/pylon/mosque/etc.)
- Lightning prevention system
- Uninterruptible power supply (UPS) for each command center
- Aircraft warning lights
- PV-solar energy system

Installation Versions

Pylon   Roof   Mobile

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