

NorthmarkCommunications

Field Deployable Telecom Solutions

Application Notes: Automatic Cellular or Satellite Backup

Situation: The phone lines at your critical facility go dead, leaving you with no way to call for telephone repair service or to contact other agencies. Outside callers are also unable to get through.

Solution 1- Automatic Cellular Telephone Backup: This is accomplished by installing a Northmark Communications ACBU system in your telephone or utility room. The outside phone lines and inside telephone wiring are connected to a special telephone jack which connects to the ACBU cabinet with an 8-pin modular cord. When the regular land line telephone service fails, the ACBU automatically switches service to the cellular network.

When land line service is restored, the ACBU automatically switches back, as long as no calls are in progress. If the phone is in use, it waits until the call is over.

To automatically re-route incoming calls, you may be able to set up your land line service with the service provider so that if it is not answered in 10 rings, the call will automatically forward to the cellular number. This only works if you do not have telephone company provided external voice mail. Internal PBX voice mail systems will not affect the ACBU.

ACBU units are available for use with most US cellular carriers. Units are not available for PCS providers such as Nextel.

Solution 2 – Automatic Satellite Telephone Backup: When cellular service is not available, Iridium satellite telephone service is an excellent, although more expensive, option for truly critical applications, such as emergency operations centers and police and fire departments.

The Northmark Communications ASBU works exactly the same as the ACBU described above. However, dialing is very different, since all calls are dialed as international calls. A distinctly different dial tone is provided so that users know when the service has switched to backup.

It is not practical to switch incoming calls from the general public to the satellite. However, if all calls will be from trained personnel, calls can be re-routed to the US Iridium access number. The user then dials the 12-digit satellite telephone number (best kept on a printed wallet card) and the call is completed.