Application Brief - Intelligent BUCs in Managed Networks

Can an operator guarantee a level of service if he is using BUCs lacking an NMS interface?

If there is an interruption of service at the site you can look at many parameters of the modem and other terminal equipment on your NMS. You can determine what corrective action to take with those elements immediately – whether to reset a function, reconfigure elements, have someone on site taken action, or deploy a repair technician. But if you do not have a way to look at your BUC, you have to assume its failure. Your only recourse is to send a technician to replace the BUC. If it is a remote location, that can be a very expensive exercise. At the very least, you lose the time it takes for a technician to arrive with a replacement. Then, because you have no way to evaluate the BUC you must replace the suspect unit and bring it back to the lab for evaluation, or send it to a service center.

From our customer service experience, many apparent BUC failures are misdiagnosed due to the operator's inability to interrogate the BUC. The cause is often another failure elsewhere in the chain. With a dumb BUC, the customer has to assume the BUC is at fault when, in fact, that is often not the case.

Can You See Your BUC?

Operating in the blind leaves you vulnerable to extended, often unnecessary service outages. The network operator runs up expenses for needless field technician deployments plus the costs of freight and evaluation fees at a service center.

In response, Terrasat has developed the next generation of intelligent Block Upconverter – the IBUC. Integration with your NMS is easily accomplished through TCP/IP, RS232, or RS485 interfaces. You can view a full range of BUC diagnostics from your network operations center. The IBUC even includes an alarm history to assist with fault analysis.
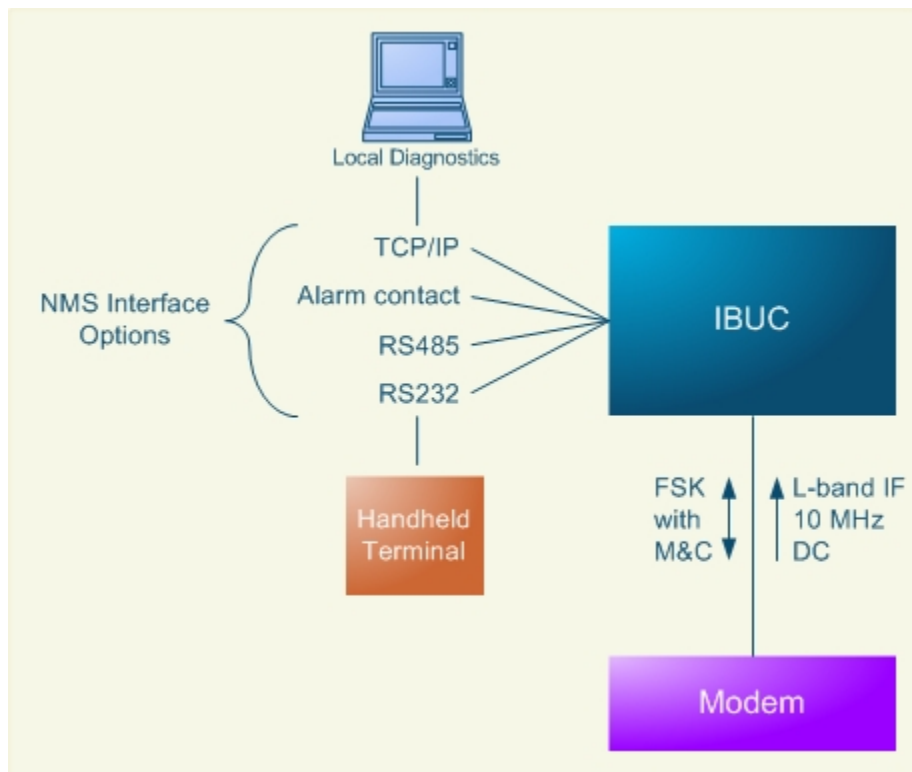
Results:

You can offer a service level guarantee to your customer that is supported by your network infrastructure. At the same time you gain many other advantages:

- You can manage all of the active elements at your remote terminals.
- You can eliminate costs of needlessly sending technicians to sites.
- You can reduce downtime.
- Your technician can more quickly diagnose the source of a terminal failure.
- You can more easily analyze remote problems and recover via your NMS.