

ubiqua

protocol analyzer edition

Deployment of wireless sensor network systems requires different levels of analysis and data capture to fully understand the status of the system and the correlation of events as they occur. Observation of network events and communication flows is crucial for the proper operation and maintenance of a deployment and having the right tools to you see and understand the interaction between the devices in the network is not an option; its a necessity. Without the right tools to observe and analyze network behavior, even the most simple task of commissioning or determining the route cause of an issue has the potential to become a very complex and time consuming proposition.

The **Ubiqua Protocol Analyzer** with its capture, decode and analytic engines (supporting the top IEEE 802.15.4-based protocols like ZigBee, ZigBee RF4CE, IETF 6LowPAN, etc.) meets the needs of developers, testers, installers and network managers to have bit by bit visibility of of network traffic in an easy to navigate environment. In addition to its capture and decode capabilities, the Ubiqua Protocol Analyzer incorporates a wide set of analytic capabilities to allow for higher level network analysis during all phases the Wireless Sensor Network development process.

Quick access to every node's attributes and configuration parameters.

View network topology with logical network links between nodes.

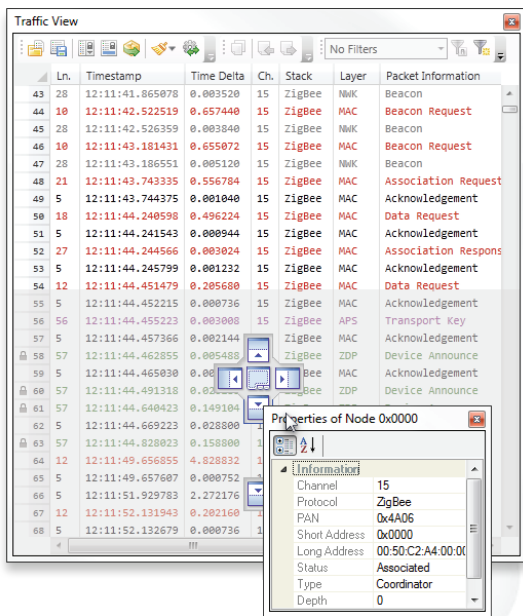
Explore the different networks available and their attributes.

Inspect network traffic over time with the new grid system.

Expandable protocol encapsulation decodes.

Stack	Time Delta	Ch.	Layer	Packet Information	MAC Src.	MAC Dst.		
55	5	12:11:44.4444	ZigBee	0.003024	15	MAC Association Response	00:50:C2:A4:00	00:50:C2:A4:00
56	56	12:11:44.4444	ZigBee	0.001232	15	MAC Acknowledgement	0x2882	0x0000
57	5	12:11:44.4444	ZigBee	0.205680	15	MAC Data Request	0x0000	0x2882
58	57	12:11:44.4444	ZigBee	0.000736	15	MAC Acknowledgement	0x0000	0x2882
59	5	12:11:44.4444	ZigBee	0.003008	15	APS Transport Key	0x0000	0x2882
60	57	12:11:44.4444	ZigBee	0.002144	15	MAC Acknowledgement	0x0000	0x2882
61	57	12:11:44.4444	ZigBee	0.005488	15	ZDP Device Announcement	0x2882	0x0000
62	5	12:11:44.4444	ZigBee	0.002176	15	MAC Acknowledgement	0x0000	0xFFFF
63	57	12:11:44.828023	ZigBee	0.026288	15	ZDP Device Announcement	0x0000	0xFFFF
64	12	12:11:49.656855	ZigBee	0.149104	15	ZDP Device Announcement	0x0000	0xFFFF
65	5	12:11:49.657607	ZigBee	0.028800	15	MAC Acknowledgement	0x0000	0xFFFF
66	57	12:11:49.828023	ZigBee	0.158800	15	ZDP Device Announcement	0x0000	0xFFFF
67	12	12:11:49.656855	ZigBee	4.828832	15	MAC Data Request	0x2882	0x0000
68	5	12:11:49.657607	ZigBee	0.000752	15	MAC Acknowledgement	0x0000	0x0000

Graphical visualization of the network topology allows you to see the system faster and give you quick access to the nodes properties.



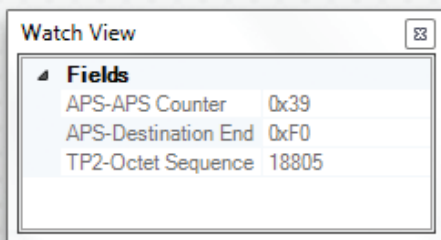
Flexible visualization with a variety of customizable and dockable views to offer a full personalized environment that helps you stay focused.

Customize your environment set up the information you need in each view, adapt the layout to your convenience and save your settings to have it available every time.

Add valuable observations to your logs by adding your personal comments to captured packets.

Decrypt secured packets to effortlessly monitor secured networks.

Notice the details among all the over the air traffic with warnings and other visual indicators in the Traffic View.



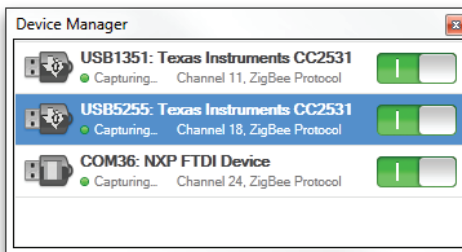
Focus your attention on the information that is relevant at a specific moment in time with the Watch View.

Keep it simple, save only filtered packets for convenient sharing or just to keep clean logs.

Supported hardware:

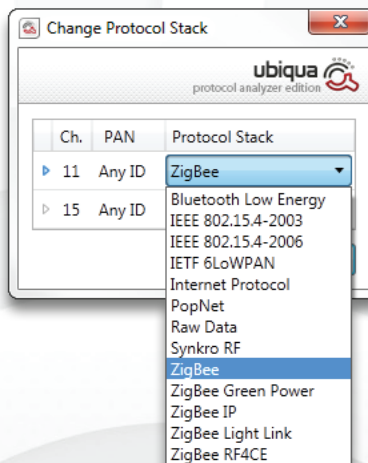
- Freescale, 1322x USB Kit (1322x-USB)
- Texas Instruments, CC2531 Evaluation Module Kit (CC2531EMK)

Capture multiple channels at the same time using a mixture of capture devices and configure them to decode the same or different protocols.

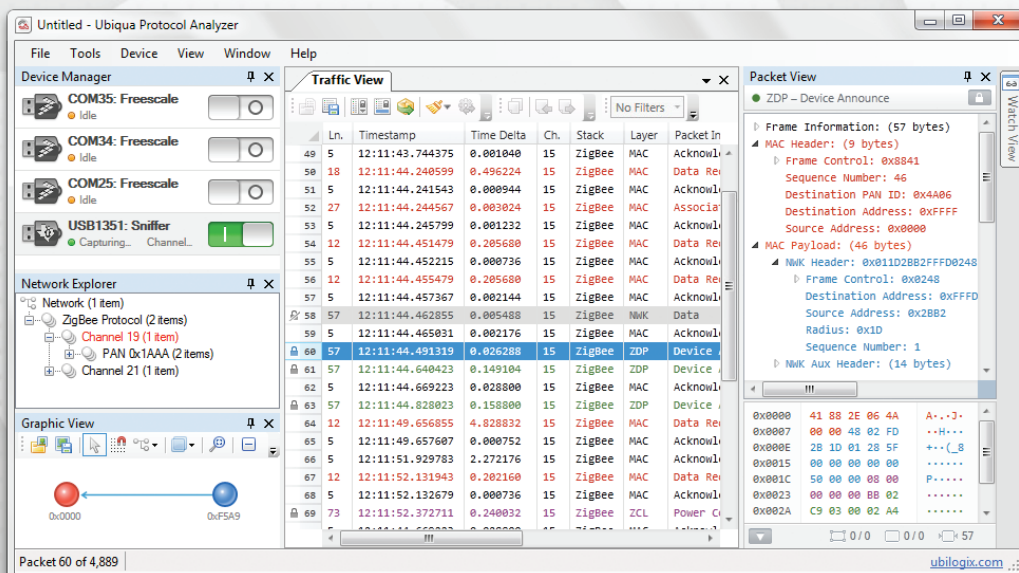


Real time capture and analysis of IEEE 802.15.4 over-the-air data packets.

Keep up to date decoding the latest changes of emergent protocols (ZigBee Protocol Stacks and Profiles, ZigBee RF4CE, IETF 6LoWPAN, etc).



Decode tunneled protocols over ZigBee such as BACnet, IEEE 11073 (Health Care), etc.



Features
Traffic View
Packet View
Network Explorer View
Device Property View
Graphical Network Layout View
Watch View
One Year of Online Support
Save and Open Captured Packets
Save and Open Filtered Packets
Save and Restore Environment (Workspace)
Color Codes for Layer Identification
Preset Filters
User Defined Filters
Multi-Channel / Multi-Device Capture
Add, Remove & Edit Comments on Packets
Auto Detection of Security Keys
Assign User-Friendly Names and Icons to Devices
Autosave Capability
Decrypt packets at MAC, NWK, and APS layers
Decrypt RF4CE packets
IEEE 802.15.4 decodes
IETF 6LoWPAN decodes
ZigBee IP decodes
ZigBee RF4CE decodes
ZigBee Network decodes
ZigBee APS decodes
ZigBee Device Profile decodes
ZigBee Cluster Library decodes
ZigBee Home Automation decodes
ZigBee Building Automation decodes
ZigBee Smart Energy decodes
ZigBee Health Care decodes
ZigBee Telecommunication Services decodes
ZigBee Test Profile 2 decodes
ZigBee Green Power decodes
ZigBee Light Link decodes