

Kestrel TSCM[®] Professional Software

New World Power Line Analytics

August 2019 | Issue 50

Technical Research and Standards Group

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The Kestrel TSCM[®] Professional Software has continued to break new ground measured in weeks with each new software release, driven by extensive scientific research and development based on the direct feedback of end-users engaged in real-world mission critical deployment.

In many instances the Kestrel[®] Software Development Group (SDG)[™] has been able to turn ideas into powerful software driven features and functionality so fast that end-users are not only pleasantly surprised (but also shocked) when a requested new feature, functionality, or tweak appears in a Beta drop file within days of the request or suggestion.

As noted in the July 2019 newsletter.

“Customer satisfaction is at an all time high with many industry significant entities providing meaningful ideas and suggestions for making the Kestrel TSCM[®] Professional Software stronger and more focused with each new release. This level of operator interaction allows our Software Development Group to prioritize the development process and bring needed features to life in near real-time. Our advanced pro-active concept of a “moving target threat model” continues to gain credibility worldwide and has become synonymous with the Kestrel TSCM[®] Professional Software methodology”.

The Mighty Kestrel[®] never sleeps, providing 24/7/365 radio frequency spectrum over-watch for private and public sector entities worldwide, from corporate to national security.

Advanced Power Line Analytics

It has been necessary to rewrite the book, so to speak, relative to power line analytics in the face of a modern moving target threat model.

All of the existing present day solutions call for snap-shot style reviews of the power lines and offer limited capability to do so in a meaningful way, generally setting the technical operator up for failure by means of a defective process.

Most of the capability challenged tools available do not provide the ability to monitor the ambient power grid on a continuous basis across dedicated radios, and simply do not permit simultaneous surveillance of both the RF OTA spectrum and the ambient power grid at the same time.

To address all of the above noted concerns, we have developed a unique 3D Energy Probe (Model 3DEP-10) that simplifies not only the analytical process, but also eliminates unnecessary conductor switching, and permits continuous dedicated radio operation.

In-fact all three (3) electrical phases of the target area can be continuously monitored in real-time on dedicated radios, or time-shared across a single radio utilizing supported RF (antenna) switch technology from DC to 18 GHz.



It must be fully understood that in general terms within working most business environments the local power infrastructure is the only wide area network connection out inbound and outbound from the facility without a so-called firewall, and is vulnerable to sophisticated technical attacks.

Competent technical inspections within a modern moving target threat model must include an appropriate level of power line monitoring and operator analytics of the target area power grid, as a documented on-going historical comparative analysis, or real-time evaluation.

Kestrel TSCM[®] Professional Software

The Electrical Power Grid has become the Latest Battleground from a TSCM Perspective — Are You Ready?

Professional Development TSCM Group Inc.

Technical Security Branch (TSB)

The Kestrel TSCM[®] Professional Software methodology fully supports the ability to fully integrate power line analytics within all key software modules, without the need to switch modes or interrupt critical RF capture operations, including the runtime spectrum and waterfall environment, Intermediate Frequency Bandwidth (IFB) mode, alerting capability, reporting capability, IQ capture and playback, etc., without interrupting any other on-going process.



The 3DEP-10 includes all necessary components to conduct power line analysis globally to CAT II 250 VAC with CE approvals.

The 3DEP-10 can be utilized as an inductive non-contact probe, direct contact conductive probe, and as an over the air power line grid antenna up to 3 GHz.

In keeping with the concept that IQ capture is key to signal analytics, our ability alert, trigger and capture IQ is fully supported within the power line analytics model.

The Kestrel[®] 3D Energy Probe (KEP) 3DEP-10 is designed to extract high-frequency signals from AC mains (utility) while completely blocking high-voltage components to a maximum of CAT II 250 VAC for worldwide deployment without searching for country specific adapters.

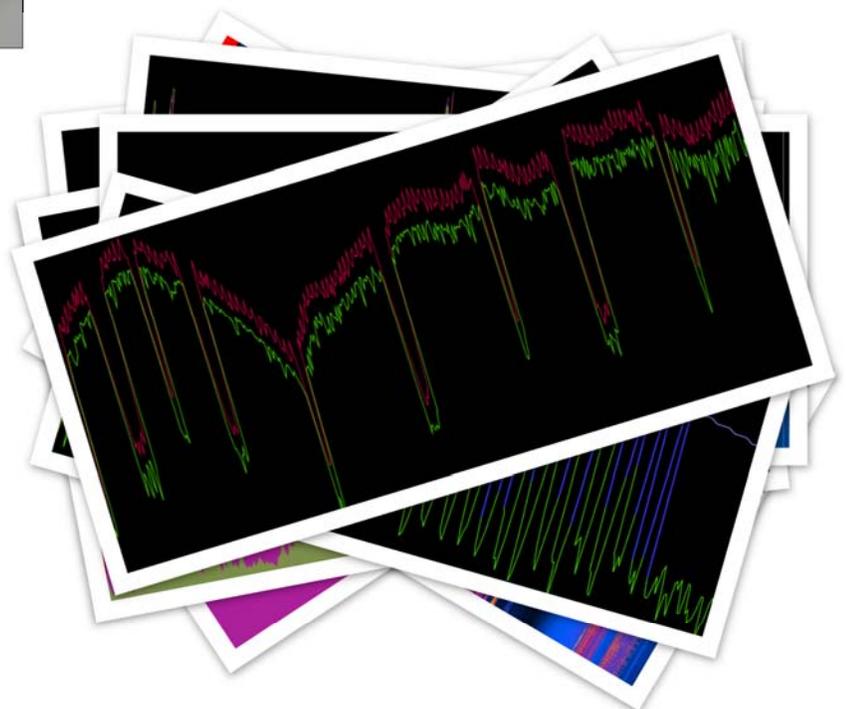
The 3DEP-10 provides complete galvanic isolation between the power line and the radio, spectrum analyzer or other test and measurement instrument, allowing for safe technical measurements of high-frequency signals, power line communication signals and electromagnetic interference or inductive coupling.

From a TSCM perspective, the technical operator is primarily concerned with the presence of any signal whether magnetic, OTA radio-frequency, or unintentional radiator potentially containing signaling, remote-control, audio, video, or data streaming related intelligence.

Such signals may be unintentional radiators, intentional unintentional radiators, client authorized devices or equipment resources and a wide range of sophisticated Technical Surveillance Devices (TSD) containing both encrypted and unencrypted intelligence.

Innovation is Simply the Beginning!

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Kestrel TSCM[®] Professional Software is innovative industry