

# OMEGA NEX™ PROCESSING SOFTWARE

## HIGH-PERFORMANCE REAL-TIME & FILE DATA PROCESSING

OMEGA NEX offers an unmatched blend of power, ease of use, flexibility and affordability. OMEGA NEX's processing engine is a proven replacement for the L3 550 decommutator and similar legacy systems throughout the industry. Built on a native 64-bit multi-threaded, service-oriented architecture. The intuitive user interface enables users to rapidly configure an unlimited range of combined, custom, and native processing configurations in minutes.

- Intuitive
- Multi-threaded
- Extensive API support
- Net-centric
- Any signal type
- Secure basic user operation
- Native 64-bit
- Native Chapter 10
- Custom interfacing



## FEATURES

### Intuitive User Interface

Based on project-oriented design, with secure basic user operation, the OMEGA NEX user interface steps you through the configuration of your project from beginning to end with a simple, intuitive design.

### Multi-Threaded & Multi-Core

Speed and scalability are fundamental to the design philosophy of OMEGA NEX. Able to scale its core processing engine across any number of system cores, OMEGA NEX establishes new benchmarks for speed in the real-time and post processing domains.

### Service Oriented Architecture

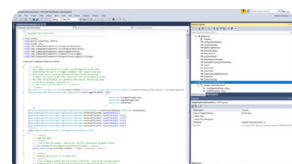
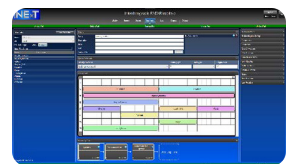
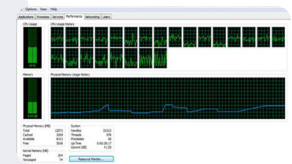
OMEGA NEX is designed from its foundation to be a service oriented architecture solution to telemetry processing. Leveraging IT infrastructure, it can be easily deployed and provisioned in virtualized environments across the extended enterprise.

### Parameter Organization

The OMEGA NEX Parameter Picker tool provides easy access to the entire parameter database and supports filterable organization of parameters and lists of parameters for independent output, displays, data storage, etc. The Parameter Picker tool is intelligently incorporated into all components of the software suite for familiarity and ease-of-use.

### Comprehensive APIs

A library of extensive application programming interfaces with sample source code are provided for inputs and outputs of the processing engine, custom processing steps and functions, as well as for external control and status monitoring of the OMEGA NEX application itself. These APIs allow OMEGA NEX to operate as the heart of any customized telemetry processing solution.



## CAPABILITIES

### Native 64-Bit

Built from the ground up as a Native 64-bit application, OMEGA NExT is able to leverage tens of gigabytes of memory at rates unheard of with legacy systems. Moreover, challenging double precision math is no longer an issue, making many complex derived parameters a thing of the past.

### Network Extensibility

No longer is your telemetry infrastructure bound to point-to-point solution. If your test requires assets to be deployed over a wide geographical area, OMEGA NExT will deliver unprecedented capability to integrate and merge dispersed data sources in real-time and post mission.

### Scalable

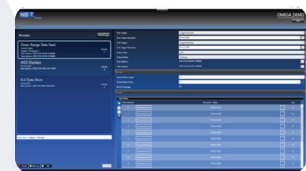
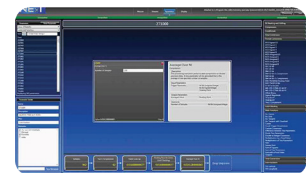
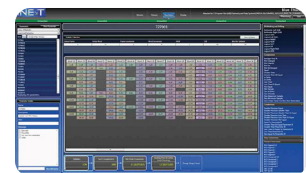
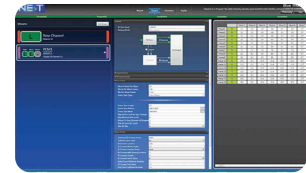
OMEGA NExT can be scaled from a simple single-stream checkout system, to a full-blown mission control center. Using soft license key technology users can rapidly upgrade their systems simply by purchasing advanced features and enabling them via a new software key.

### Parameter Organization

OMEGA NExT offers an incredible pallet of over 135 built-in drag and drop libraries for input format conversions, masking, bit concatenation, logic, math, and trigonometry. OMEGA NExT has the ability to include an unlimited array of custom user-coded functions. With the included Custom Instruction Wizard you can build your own custom coded processing instructions directly into the system in minutes.

### Focus Data Distribution

The Focus data distribution utility of OMEGA NExT provides high-speed network output of selected parameters in a variety of common formats or you can define your own output formats. Any subset or all parameters may be programmed for fixed sample rate and/or data-driven (all processed samples) output to networked clients for display, storage, and/or further processing.



## INTEGRATED CLARITY DISPLAY SOFTWARE

Using the latest vector display technology, Clarity delivers new levels of richness and depth. Clarity Builder allows display designers to quickly define intuitive and informative displays. Clarity clients allow users to view their data and interact with their displays in real-time or playback.

There are no license installation restrictions on Clarity Display and Builder software; they may be installed on as many platforms as desired by the end user(s). Clarity Displays feature programmable sample-driven and data-driven support in the presentation of real-time and playback data. Clarity Display clients may connect to any OMEGA NExT server system for data presentation of any telemetry data source inputs. All Clarity Display clients feature configurable instant replay for immediate independent re-examination of displayed data, without requiring playback of front-end recorder file, before resuming real-time data monitoring.

