

# ADEPT(V)4

## ADAPTIVE DIAGNOSTIC ELECTRONIC PORTABLE TESTSET

### APPLICATIONS

- Radars
- C4I Systems
- Communications systems



ADEPT(V)4 is the latest version of the Noblis Adaptive Diagnostic Electronic Portable Testset (ADEPT®). These Test Automation Workstations are designed to aid technical personnel in the maintenance, alignment, calibration and error diagnosis of complex electronic systems through the structured collection and analysis of test point measurements on the Equipment Under Test (EUT).

#### ADEPT:

- Helps detect and troubleshoot error and out-of-alignment conditions
- Collects and analyzes maintenance data
- Supports test automation, condition-based maintenance (CBM) and interactive training
- Improves system readiness and operational performance
- Reduces manpower support requirements and life cycle support costs

ADEPT eliminates the need for traditional manuals, paper documentation and discrete test equipment and eases the burden on system maintainers by integrating the required test equipment functionality and automating the testing process. All necessary documentation is stored within ADEPT and presented to the user in a familiar format. When a test step calls for the use of a specific embedded test instrument, ADEPT opens the instrument control and display window and sets up the instrument for optimal test point measurement. A “known good” reference is presented to the user along with a pass/fail indication. All operations and measurements are stored for after-action analysis, off-line training and prognostics analysis for proactive remediation of potential error/out of-tolerance conditions.

ADEPT was initially developed under the Navy’s Small Business Innovation Research (SBIR) program to streamline maintenance and troubleshooting on the AN/SPY-1 family of phased array radars. However, since the system uses commercial-off-the-shelf (COTS) instrumentation modules, ADEPT variants can be used to support both planned maintenance (PMS) and condition-based maintenance (CBM) of other radars and complex electronic systems in military or commercial applications.

ADEPT also contains functionality for distance support operations, allowing Subject Matter Experts (SMEs) to view and operate ADEPT remotely.

## ADEPT® - Adaptive Diagnostic Electronic Portable Testset

### BENEFITS

- Smaller physical and logistical footprint than equivalent General Purpose Electronic Test Equipment (GPETE)
- Consolidates several functions of GPETE into an Automated Test System (ATS)
- Maintenance procedures automation
- Uniform, improved maintenance and test data recording
- Decreases routine maintenance time
- Increases system readiness

### SPECIFICATIONS:

Operating System(s)	Microsoft Windows 10®, Red Hat Linux
System Controller	Intel® Xeon Intel Core i7 CPU, 2.66 GHz
Mass Storage	240 GB Solid State SATA
RAM	4 GB standard, expandable to 24 GB
Oscilloscope	4 channel, 2.5 GS/sec, 500 MHz 10 Bit Resolution
Ethernet	10/100/1000 Base T, 2 ports
Digital Multimeter	7½ digit, ±10 nV to 1000 VDC (600 VAC), 1.8 MS/Sec ±1 pA to 3A
Input Switching	12 x 1 or 6 x 2 switch matrix
RF Power Sensor	-67 to +23 dBm, 10 MHz to 8 GHz (average power) -60 to +20 dBm, 50 MHz to 18 GHz (peak power)
Display Touchscreen	17" diag. 1920x1080 (16:9) TFT active-matrix color LCD LED backlight
Smart Card Reader	Omnikey 3121
Expansion	8 PXI/PXIe Hybrid backplane instrument slots USB and GPIB interfaces
Dimensions	18.5 x 17 x 8 in
Weight	25.5 lb
Power	110-240 VAC 50-60 Hz