

## Wideband Systems, Inc.

### 14-Track Analog Recorder Replacement

Wideband Systems is pleased to offer a plug-compatible replacement for the venerable 14-track analog recorder. The robust and reliable **DRS3300E-XXGB-16A16D** is a disk-based recorder which fully integrates a 1600<sup>+</sup> Mbps sustained recorder/reproducer, an intelligent multiplexer, 16 flexible analog channels, and 16 digital (PCM) channels.

The recorder accepts 16 analog signals on input BNC connectors and presents 16 analog signals on output BNC connectors. In the strict 14-track replacement mode, only 14 channels are used and all channels are set to sample their analog signals at 10 MSPS. Assuming a typical maximum analog frequency of 4 MHz, this configuration provides 2.5X oversampling which has proven to be very effective.

The **DRS3300E-XXGB-16A16D** has features and capabilities that go well beyond the legacy 14-track recorder. Channel-to-channel time skew is approximately 100 nsecs and playback time-base is exceptional due to an internal OCXO reference. Each of the 16 analog channels employs an 8-bit converter and can be independently configured as detailed in the following table:

Sample Rate (MSPS)	OFF, 1, 2, 5, 10, 16, 20, 40, 80 MSPS
Input Voltage (+/- V)	0.2, 0.5, 0.7, 1.0, 2.0, 3.0, 4.0, 5.0 Volts (+/-)
Input Impedance (Ohms)	50, 75, 600, 1000 Ohms
Output Voltage (+/- V)	0.2, 0.5, 1.0, 1.5, 2.0 Volts (+/-)
Output Impedance (Ohms)	50, 75, 600, 1000 Ohms

Each of the 16 digital (PCM) channels accepts and presents clock and data using optionally provided breakout cables. The recorder can be jumper-configured for Single Ended TTL or Differential RS422 signals. The digital channels support PCM rates from 0 to 40 Mbps and allow clock-to-data phase setting of 0 or 180 degrees.

The **DRS3300E-XXGB-16A16D** is a 5U rackmount instrument weighing 53 pounds. The recorder has a removable diskbank to facilitate security concerns and back-to-back mission support. This diskbank contains nine high-performance SCSI 10K RPM disk drives (36GB, 72GB, or 144GB each). The record time is a function of the diskbank capacity and the aggregate recording rate; at maximum rate (200MB/sec) the recorder will continuously record/reproduce for 27, 54, or 108 minutes.

The recorder can be locally controlled by the intuitive front panel (REC, STOP, PLAY), remotely controlled using a simple RS-232 command line protocol, or remotely controlled across a network (web server). Typically the system configuration includes a PC (WSI-1UPC-01) providing GUI-based control and additional network support. Additionally, the recorder supports archiving to optionally supplied DAS3000-AIT3 (tape array) and supports direct transfers to SCSI-equipped PC workstations.

Ordering Information	
DRS3300E-36GB-16A16D	16 Analog & 16 Digital Channels -- 324GB Total Capacity
DRS3300E-72GB-16A16D	16 Analog & 16 Digital Channels -- 648GB Total Capacity
DRS3300E-144GB-16A16D	16 Analog & 16 Digital Channels -- 1296GB Total Capacity