VXI Technology™

# 2412

# 200MS/s Digitizer. FFF for Tek 7612D non VXI

- Designed to Replace the Tektronix 7612D Digitizer
- Electrical Specifications Meet or Exceed Those Listed on Pages 1-2, 1-3 of 7612D Instruction Manual and Table 1-1 of 7A16P Instruction Manual
- Software Command Set Compatible with 7612D
- Mechanical Design Compatible with 7612D
- True Dual-channel Analog Digitizer
- Qualified on Several Government Testers, Including AN/USM-484 HTS, A-10 IATS, AN/USM-603, and TADS/PNVS EO

## Overview

The model 2412 has been designed as a form, fit and function replacement for the obsolete Tektronix 7612D digitizer, and two 7A16P programmable amplifiers.

The 7612D was an impressive instrument in its era and had several unique features that enabled it to perform to its specifications. Although current digitizers have faster sample rates and more memory, they cannot be used in applications that were written for the 7612D. Some of the unique properties of the 7612D are:

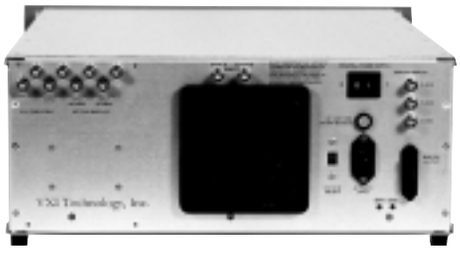
1. The Analog to Digital Conversion is performed by two special Electron Bombarded Semiconductor (EBS) tubes. These are no longer available.

2. Dual Timebase, one for each input channel. Allows for two independent simultaneous measurements.

3. An independent GPIB address exists for each analog input.

4. Sampling rates can be varied on-the-fly. Records can be divided into segments, each with a programmable sampling interval. This allows a better use of memory and samples.

Rear View



For applications that require the replacement of a Tektronix 7612D digitizer without the costs of software, hardware or documentation redesign, the 2412 becomes the only choice. Three man-years of effort went into the development of the 2412 in order to provide a form, fit and function replacement of the Tektronix 7612D.

The 2412 uses a 68340 processor with flash ROM that houses the firmware. This is an important feature during test and debug of the 2412 in an existing test station, since changes can easily be updated over the GPIB if a particular TPS is operating in a unique manner.

The 2412 has been designed with 70% less components than the existing 7612D digitizer. All components have also been selected to allow 10-15 year product support. Calibration is performed via software without removing any covers. All calibration constants are stored in non-volatile memory and can be recalled at any time.

## General Specifications

**Dual 90MHz Bandwidth inputs. 200MS/s each.**

**8-bit Resolution**

**90 to 132VAC, 180 to 250VAC, 48 to 440 Hz Line Input**