

# Product Data

## Multichannel Data Acquisition Unit — Type 2816

Part of Multichannel Analysis System Type 3550, Multichannel Data Acquisition System Type 3551 and PULSE, the Multi-analyzer System Type 3560

### USES:

- Front-end data acquisition frame for Type 3550, 3551 and 3560 multichannel systems
- Housing an interface module and up to 10 input/output modules

### FEATURES:

- Up to 10 modules can be installed allowing measurements in up to 32 channels
- Up to 4 generator modules can be installed
- Up to 4 sound intensity probes can be supported
- Signal output is available on up to 8 channels

Multichannel Data Acquisition Unit Type 2816 is a large frame with power supply. It houses the input/output modules for Type 3550, 3551 and 3560 multichannel systems.

A Type 2816 unit can be used for measurement of up to 32 channels.

## Introduction

Multichannel Data Acquisition Unit Type 2816 is a front-end frame, that has an AC power supply and back-plane wiring for an interface module and houses up to 10 input/output modules. This allows the connection of up to 32 analogue channels per Type 2816 frame. In a Type 3560 system, Type 2816 is connected to the TAXI-interface for the DSP Boards in your PC using coaxial cable AO0370.

The module types that can be used are the same as for Acquisition Front-end Type 2825.

### Modules Available for 2816:

- Type 3015: 25kHz Input Module
- Type 3016: 100kHz Input Module
- Type 3017: Sound Intensity Module
- Type 3022: 4-channel Input Module (3551 and 3560 only)
- Type 3028: 4-channel Microphone Module (3560 only)
- Type 3107: Generator Module
- Type 5955: Signal Output Module
- Type 7521: Signal Analyzer Interface Module
- FA1009: Blank Panel



Fig.1 Multichannel Data Acquisition Unit Type 2816 with a Signal Analyzer Interface Module Type 7521, eight 4-channel input modules and two generator modules fitted

A Blank Panel FA 1009 must be used to cover all slots that are not in use for proper cooling of the unit.

## Configuration

The 11 module slots in Type 2816, are numbered from left to right (see Fig.2).

It is easy to insert or replace modules in the available slots. Slot 0 must contain a Signal Analyzer Interface Module Type 7521. Slots 1 to 10 can contain up to ten input/output modules. The following maxima per type apply:

- 8 3015 25 kHz input modules
  - 8 3016 100 kHz input modules (max. of 4 in a 3550 system)
  - 2 3017 Sound intensity modules
  - 8 3022 4-channel input modules (25 kHz with CCLD)
  - 8 3028 4-channel microphone modules (25 kHz)
  - 4 3107 Generator modules
  - 2 5955 Signal output modules
- Types 3015, 3016, 3022 and 3028 input modules are installed, starting at slot 1. It is possible to install Types 3015 and 3016 in the same Type 2816 frame, but they cannot be activated at the same time. Similarly, single channel and four channel modules can be installed in the same frame,

but cannot be active at the same time. The 4 channel modules, Types 3022 and 3028, can be mixed and activated at the same time. Generator and sound intensity modules are installed in adjoining slots, starting at slot 10 (see Fig. 2). You must place the sound intensity module in the slots to the right of any generator modules.

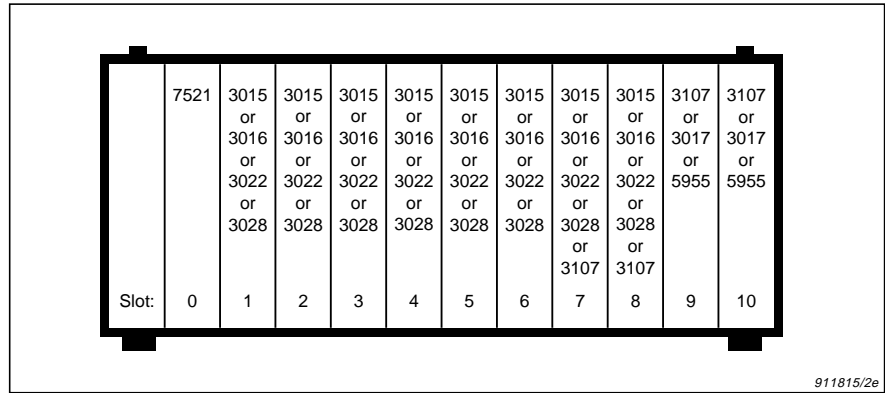


Fig.2 Allowable installation of modules in Multichannel Data Acquisition Unit 2816

## Specifications 2816

Type 2816 is a mainframe with power supply and 11 slots for modules:

### AVAILABLE MODULES:

3015 25 kHz Input Module  
 3016 100 kHz Input Module  
 3017 Sound Intensity Module  
 3022 4-channel Input Module (3551 & 3560 only)  
 3028 4-channel Microphone Module (3560 only)  
 3107 Generator Module  
 5955 Signal Output Module  
 7521 Signal Analyzer Interface Module  
 FA1009 Blank Panel

### MAXIMUM NUMBER OF MODULES:

8 25 kHz Input Modules Type 3015  
 8 100 kHz Input Modules Type 3016 (max. of 4 in a 3550 system)  
 2 Sound Intensity Modules Type 3017  
 8 4-channel Input Modules Type 3022  
 8 4-channel Microphone Modules Type 3028  
 4 Generator Modules Type 3107

2 Signal Output Modules Type 5955  
 1 Signal Analyzer Interface Module Type 7521

### CONNECTION TO PC DSP BOARDS (Type 3560 only):

Use cable AO0370 and 1 Signal Analyzer Interface Module Type 7521

### POWER REQUIREMENTS:

**Voltage:**  
 100, 115, 127, 200, 220 or 230/240V AC  $\pm 10\%$   
**Frequency:**  
 47.5–66Hz, or 400Hz  $\pm 10\%$  at 115V  
**Power Consumption:** Max. 300 – 350 VA  
 when fitted with:  
 1  $\times$  7521 Signal Processor  
 8  $\times$  3015 25kHz Input Module  
 2  $\times$  3107 Generator Module

### GENERAL:

**Cabinet:** Supplied as Model A (lightweight metal cabinet) or Model C (as A but with air tray and flanges for standard 19 inch racks)

### DIMENSIONS (A-cabinet without feet):

**Height:** 177mm (7.0 inches)  
**Width:** 430mm (16.9 inches)  
**Depth:** 500mm (19.7 inches)  
**Weight:** 23 kg (51 lb.) when fitted with 11 blank panels FA1009  
 31 kg (68 lb.) when fitted with:  
 1  $\times$  7521 Signal Analyzer Interface Module  
 8  $\times$  3015 25kHz Input Module  
 2  $\times$  3107 Generator Module

### SAFETY:

IEC 348: Safety requirements for electronic measuring apparatus

### COMPLIANCE WITH STANDARDS:

<b>CE</b>	When incorporated into a Type 3550, 3551 or 3560 multichannel system, Type 2816 complies with the system standards stated in the relevant system Product Data for Type 3550, (BP 1022), 3551 (BP 0994) or 3560 (BP 1611)
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## Ordering Information

Type 2816 Multichannel Data Acquisition Unit

### Includes the following accessories:

Mains Cable  
 2  $\times$  VF0015: Spare fuses T 5A/250V

### Optional Accessories

**FA1009:** Blank Panel  
**WH2693:** Modification to Safety Class I of IEC601-1

**UA 1124:** Kit for Mounting 2816 in 19" Standard Rack

Brüel&Kjær reserves the right to change specifications and accessories without notice

**Brüel & Kjær** 

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