

ARTISAN®
TECHNOLOGY GROUP

Your **definitive** source for quality pre-owned equipment.

Artisan Technology Group
(217) 352-9330 | sales@artisantg.com | artisantg.com

Full-service, independent repair center
with experienced engineers and technicians on staff.

We buy your excess, underutilized, and idle equipment
along with credit for buybacks and trade-ins.

Custom engineering
so your equipment works exactly as you specify.

- Critical and expedited services
- In stock / Ready-to-ship
- Leasing / Rentals / Demos
- ITAR-certified secure asset solutions

Expert team | Trust guarantee | 100% satisfaction

All trademarks, brand names, and brands appearing herein are the property of their respective owners.

Visit our website - *Click HERE*

VXI Instruments®
the test solutions provider



FlexCP Platform

- Outputs up to 30V
- 100MS/sec, 16 Bit bip.
- Floating design

PXA722x Arbitrary Generator Family

Features

- Based on VX Instruments FlexCPP
- Output voltages up to +30V or ±15V
- 100MS/sec. with 16 Bit resolution
- Floating option available
- Complex waveform sequencing possible
- On the fly amplitude and offset changing
- Additional marker output
- Wide range of sample rates due to programmable internal PLL
- High Bandwidth

Product information:

Flexible configurable PXI Platform
This family of Arbitrary Function Generators is based on the "Flexible configurable PXI Platform" (FlexCPP). This platform allows many variants of customer configured Arbitrary Function Generators.

High speed, high res. arbitrary waveform generator
The PXA722x ArbGen-Family features up to two simultaneously working channels with 100 MS/sec., 16-bit resolution and an output voltage up to +30V or ±15V.

Every ArbGen channel has its own 2 MB memory. The whole amount of 1 million samples can be partitioned into one ore more waveform-segments.

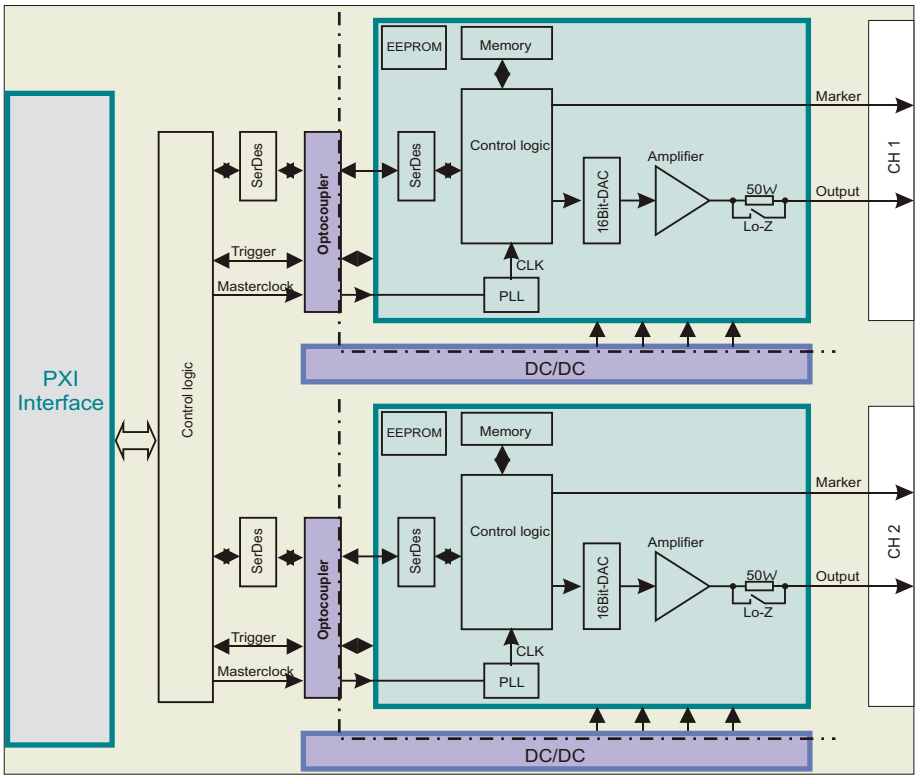
Depending on the number of channels and the floating-option, the Arbitrary Function Generators are built into a compact 3U PXI device for 1 or 2 slots.

Built-in waveform functions
Predefined waveforms (DC, sine, square, triangle, sawtooth) can be configured via software driver. Furthermore is possible to load a user-created waveform.

Fully independent channels
Each channel has its own Clock-PLL, memory and state machine for START, STOP, TRIGGER, SAMPLING and SEQUENCING. This guarantees the two channels to work complete independently. A great amount of trigger capabilities results in multiple sophisticated instrument and channel synchronisation possibilities.

Complex waveforms without memory reloading
Arbitrary waveforms will be loaded via data files into the on-board memories for waveform data (1MS) and sequence data (512 sequences). The memory can be segmented and sequenced in any desired order. Furthermore amplitude and offset can be changed on the fly without writing new data into the memories.

High output voltages allows easy stimulation
The standard output voltage is ±15V (30Vpp). With an optional extension the output stage can be switched to achieve output voltages up to +30V into high impedance load. This allows high voltage waveform stimulation without additional signal conditioning.



Ordering Option	Comment
EXTVOLT	Extended output voltage range
TCXO	TCXO Oscillator

All product data[1] are specified for an ambient temperature of 23°C ±5°C, after 1 hour warm-up time!

General	Specification	Comment
Module size	1 slot, 3U 2 slots, 3U	PXA7221, PXA7222, PXA7223 PXA7224
Module weight	< 0.7kg	
Front connector type	SMA	
Operating temperature	0...40°C	
Operating altitude	up to 2000 m	
Humidity	to 90% relative humidity below 30°C to 45% relative humidity up to 50°C	
Storage temperature range	-25...70°C	
Electrical safety	according EN61010-1	
Isolation output to PE	60V CAT I, Pollution Degree 2	

Waveform	Specification	Comment
Output voltage resolution	16Bit	
Output impedance	50Ω or Lo-Z (~10Ω)	$R_{out;}$ software selectable
Output voltage ranges		software selectable
range 1	+/-2,5V	
range 2	+/-5,0V	
range 3	+/-10,0V	
range 4	+/-15,0V	
range 5	0...10V	additionally with option EXTVOLT
range 6	0...20V	additionally with option EXTVOLT
range 7	0...30V	additionally with option EXTVOLT
Max. output current		
range 1 - 3	100mAp	
all other ranges	30mAp	
AC-Bandwidth[2]		
range 1 + 2	40MHz (3dB)	R_{load} = 50Ω; R_{out} = 50Ω or Lo-Z
all other ranges	10MHz (3dB)	R_{load} = 1kΩ
Slewrate	>200V/usec	for all ranges; into Hi-Z
DC-Accuracy		for all ranges; into Hi-Z
DC-Offset	<0,2% of full scale	
DC-Gain	<0,2% of value	
Waveform memory	2MB, 1MS	

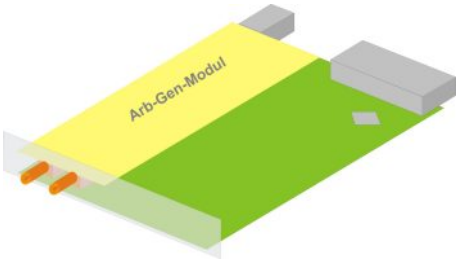
Time Base	Specification	Comment
Accuracy	50ppm, 1ppm with option TCXO	in operating temperature range
Aging per year	5ppm, 1ppm with option TCXO	
Sampling frequency	0,10S/sec ... 100MS/sec.	
Output frequency resolution	100ppm	of programmed value (frequency)

[1] Product specification and description in this document are subject to change without notice!
[2] At 50% amplitude of chosen range

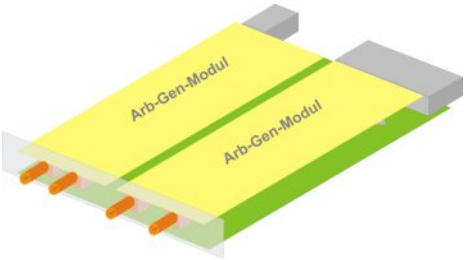
Trigger System	Specification	Comment
Input for each module from		
Internal function module	one function module can trigger the other one	for example trigger on marker-bit
Software	via software command	
PXI trigger	trigger 0..7 and star-trigger	from the PXI backplane
Output to		
Internal function module	output to the other module	for example marker-bit
PXI trigger	output of each func. modules trigger source to the trigger lines of PXI backplane	
System Delay	1 sample clock + 120ns	trigger to waveform output

Marker Output	Specification	Comment
Output voltage	TTL	TTL output via SMA front connector
Output current (low state)	25mA	
Output current (high state)	25mA	

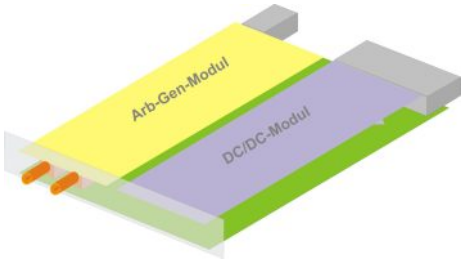
PXI Capabilities	Specification	Comment
PXI 10MHz usage	supported	then time base accuracy depends on PXI rack
PXI TTL/trigger usage	supported	PXI trigger 0...7; input and output
PXI star-trigger usage	supported	input only



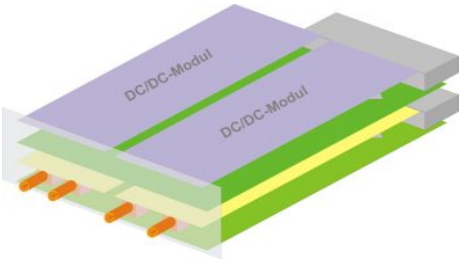
PXA7221
1channel non floating ArbGen in 1 slot



PXA7222
2 channel non floating ArbGen in 1 slot



PXA7223
1channel floating ArbGen in 1 slot



PXA7224
2 channel floating ArbGen in 2 slots

VX Instruments GmbH
Bernsteinstr. 41A
84032 Landshut-Altdorf
Germany

Phone: +49 (0)871 931 555-0
Fax: +49 (0)871 931 555-55
Email: sales@vxinstruments.com
Web: www.vxinstruments.com

Copyright © VX Instruments GmbH
Date: 2013-03-14

Artisan Technology Group is an independent supplier of quality pre-owned equipment

Gold-standard solutions

Extend the life of your critical industrial, commercial, and military systems with our superior service and support.

We buy equipment

Planning to upgrade your current equipment? Have surplus equipment taking up shelf space? We'll give it a new home.

Learn more!

Visit us at **artisantg.com** for more info on price quotes, drivers, technical specifications, manuals, and documentation.

Artisan Scientific Corporation dba Artisan Technology Group is not an affiliate, representative, or authorized distributor for any manufacturer listed herein.

We're here to make your life easier. How can we help you today?

(217) 352-9330 | sales@artisantg.com | artisantg.com

ARTISAN® TECHNOLOGY GROUP