



**TELEDYNE LECROY**  
Everywhereyoulook™

# High Voltage Differential Probes

HVD3605, HVD3206  
HVD310x



## Key Features

- 1 kV, 2 kV, 6 kV CAT safety rated models
- World's only 1500 V<sub>dc</sub> safety rated probe per IEC/EN 61010-031:2015
- Widest differential voltage ranges available
- Exceptional common-mode rejection ratio (CMRR) across a broad frequency range
- 1% gain accuracy
- High offset capability at both high and low attenuation
- AC and DC coupling
- ProBus active probe interface with automatic scaling
- Auto-zero capabilities
- Wide oscilloscope compatibility

The HVD3000 series high voltage differential probes provide high CMRR over a broad frequency range to simplify the measurement challenges found in noisy, high common-mode power electronics environments. The probe's design is easy-to-use and enables safe, precise high voltage floating measurements.

## Exceptional Common-Mode Rejection Ratio

The CMRR for the probes is exceptional out to very high frequencies, greatly improving measurement capability in the noisy, high common-mode environments found in power electronics. The high CMRR combined with low probe noise and high offset capability allows measurement of very small control signals floating on high common-mode voltages.

## High Precision Measurements

HVD3000 series probes provide 1% gain accuracy enabling precise voltage measurements. AutoZero capability ensures further measurement precision by allowing small offset drifts to be calibrated out of the measurement.

## Widest Application Coverage

The HVD3000 series of high voltage differential probes cover the fullest range of applications, from 120/240 V switch-mode power supplies through 600 V class and 5 kV class electrical apparatus. Each model has the best gain accuracy, widest differential and offset voltage range, and superior CMRR.

## World's Only 2 kV Rated Probe

The HVD3206 is specifically designed for 1500 V<sub>dc</sub> solar photovoltaic (PV) measurements per the IEC/EN 61010-031:2015 standard.

## Complete Probe Integration

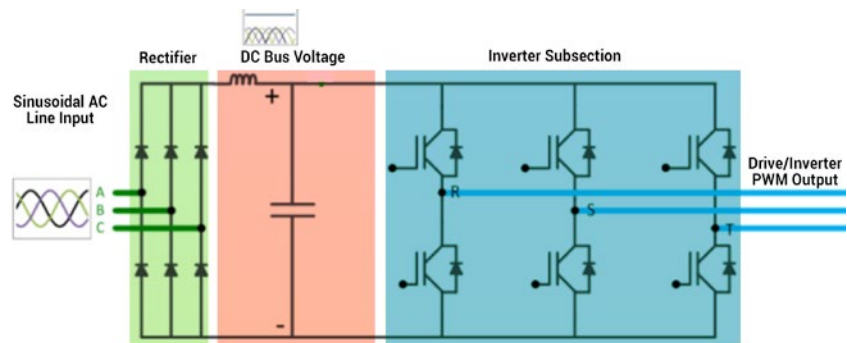
The ProBus interface provides power and communication to the probe eliminating the need for a separate power supply or batteries. Attenuation is automatically selected based on oscilloscope gain range (V/div) setting.

# WIDE APPLICATION COVERAGE - 600 V TO 5 KV APPARATUS

## 600 V Class, 3-phase Electrical Apparatus

The HVD310x probes are available in a range of bandwidths from 25 to 120 MHz with standard 2 meter cable (6 meter cable model available). All probes have industry best CMRR for best noise-immunity, are guaranteed to 1% gain accuracy, and have the industry's widest differential voltage range in a 1 kV rated high voltage differential probe.

- Only 1 kV safety rated probe that serves the full 600 V class requirement
- 1500 V differential range with industry's best overshoot measurement capability (to 2000 V<sub>pk</sub>)
- Industry's best offset capability (1500 V) when used with HDO Series oscilloscopes
- Bandwidth rating up to 120 MHz
- 6 meter cable model available (HVD3106-6M)
- Ideal voltage range and performance for Gate drive probing
- Models available without accessories for a lower cost (HVD310x-NOACC)



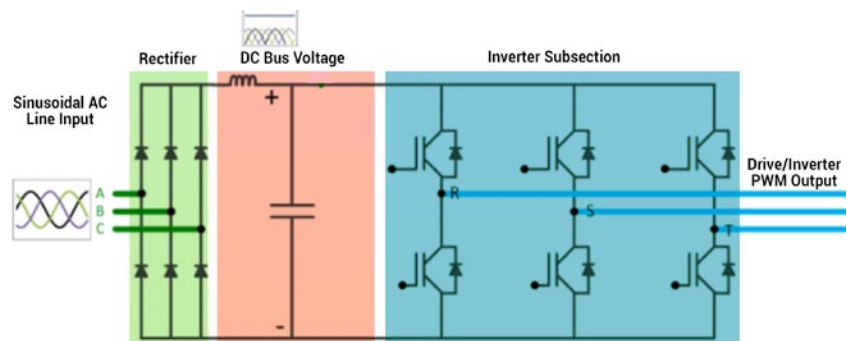
| Sinusoidal AC Line Input            |                    |              | DC Bus Voltage  | Drive / Inverter Pulse-Width Modulated (PWM) Output |              |                                   |              |
|-------------------------------------|--------------------|--------------|-----------------|-----------------------------------------------------|--------------|-----------------------------------|--------------|
| V <sub>rms</sub> or V <sub>ac</sub> | V <sub>pk-pk</sub> |              | V <sub>dc</sub> | V <sub>pk</sub> (Rated)                             |              | V <sub>pk</sub> (with Overshoot)* |              |
|                                     | Line-Line          | Line-Neutral |                 | Line-Line                                           | Line-Neutral | Line-Line                         | Line-Neutral |
| 400                                 | 1131               | 653          | 566             | 566                                                 | 327          | 849                               | 491          |
| 480                                 | 1358               | 784          | 679             | 679                                                 | 392          | 1019                              | 588          |
| 600                                 | 1697               | 980          | 849             | 849                                                 | 490          | 1274                              | 735          |
| 690                                 | 1952               | 1127         | 976             | 976                                                 | 563          | 1464                              | 845          |

\*Based on 50% overshoot condition

## 5 kV Class, 3-phase Electrical Apparatus

The HVD3605 probe is safety-rated for 6000 V<sub>rms</sub> and 8485 V(DC + peak AC) for full coverage of 5 kV class apparatus. The probe has ample 100 MHz of bandwidth, is standard with a 6 meter cable, is guaranteed to 1% gain accuracy, has excellent CMRR, and has the industry's widest differential voltage range.

- Only probe that permits AC Line, DC Bus, and Drive/Inverter output voltage probing through 4160 V apparatus ratings
- Industry's best overshoot measurement capability (to 7600 V<sub>pk</sub>)
- Industry's best offset capability (6000 V) when used with HDO Series oscilloscopes
- Standard 6 meter cable



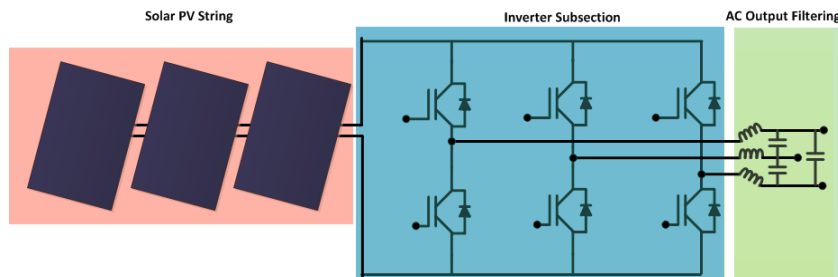
| Sinusoidal AC Line Input            |                    |              | DC Bus Voltage  | Drive / Inverter Pulse-Width Modulated (PWM) Output |              |                                   |              |
|-------------------------------------|--------------------|--------------|-----------------|-----------------------------------------------------|--------------|-----------------------------------|--------------|
| V <sub>rms</sub> or V <sub>ac</sub> | V <sub>pk-pk</sub> |              | V <sub>dc</sub> | V <sub>pk</sub> (Rated)                             |              | V <sub>pk</sub> (with Overshoot)* |              |
|                                     | Line-Line          | Line-Neutral |                 | Line-Line                                           | Line-Neutral | Line-Line                         | Line-Neutral |
| 2400                                | 6788               | 3920         | 3395            | 3395                                                | 1960         | 4244                              | 2450         |
| 3300                                | 9334               | 5388         | 4666            | 4666                                                | 2694         | 5833                              | 3368         |
| 4160                                | 11766              | 6794         | 5884            | 5884                                                | 3397         | 7355                              | 4246         |

\*Based on 25% overshoot condition

# WORLD'S ONLY 2 KV SAFETY RATED MODEL

## Solar PV Inverters

The HVD3206 probe is rated to 1500 V<sub>DC</sub> (2000 V DC + peak AC). This makes the probe ideal for testing single-phase or three-phase inverters or newer 1500 V<sub>DC</sub> rated string-inverters (per IEC/EN 61010-031:2015). The HVD3206 has the same excellent 1% gain accuracy, industry-leading CMRR, industry-best offset range, and a guaranteed 2000 V<sub>pk</sub> differential voltage range.



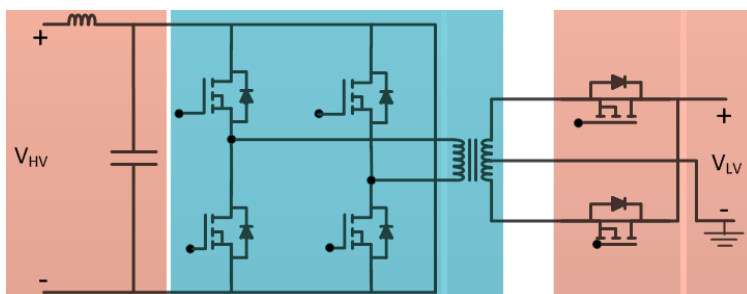
| Solar String DC Bus Voltage | Sinusoidal AC Output    |              |                                   |              |
|-----------------------------|-------------------------|--------------|-----------------------------------|--------------|
|                             | V <sub>pk</sub> (Rated) |              | V <sub>pk</sub> (with Overshoot)* |              |
|                             | Line-Line               | Line-Neutral | Line-Line                         | Line-Neutral |
| 1000                        | 849                     | 490          | 1104                              | 637          |
| 1500                        | 849                     | 490          | 1104                              | 637          |

\*Based on 30% overshoot condition

- Only 1500 V<sub>DC</sub> safety rated probe per IEC/EN 61010-031:2015 (certification pending)
- Guaranteed 2000 V<sub>pk</sub> differential voltage range
- Industry's best offset capability (1500 V) when used with HDO Series oscilloscopes
- Bandwidth rating of 120 MHz

## DC-DC Converters

High-power DC-DC converters can operate at substantial voltages, 500 V<sub>DC</sub> or higher. The HVD310x models provide up to 1000 V<sub>DC</sub> common-mode (HVD3206 models provide up to 1500 V<sub>DC</sub>) and high precision (1% gain accuracy) DC voltage measurements. Automatic switchable attenuation keeps the probe in the optimum measurement range. Multiple probes can be used to understand complex device switching performance.



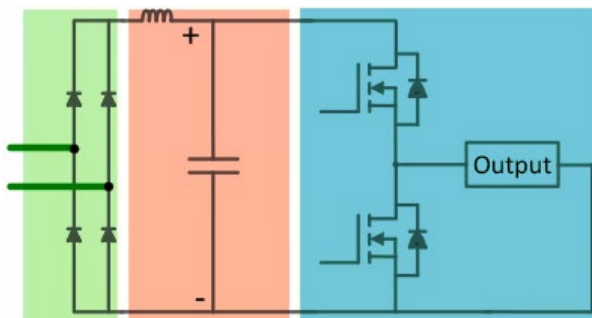
- Common mode range up to ±2000 V (DC + peak AC) with HVD3206
- High precision - 1% accuracy
- Automatic gain switching for optimum performance

# SUPERIOR PERFORMANCE AT LOWER VOLTAGES

## 120 V / 240 V Half-Bridge Circuit Topologies

Single-phase switch-mode power supplies and other devices utilizing half-bridge topologies need test and validation at DC bus voltages up to 340 V<sub>DC</sub> with up to 680 V<sub>p-p</sub> on the input voltage. HVD310x probes are cost-effective solutions for probing the wide range of high voltage signals present in these systems. “No Accessory (NOACC)” versions of these probes permit additional cost savings. Use your existing accessories or purchase just the ones you want.

- High precision - 1% accuracy
- Automatic gain switching for optimum performance

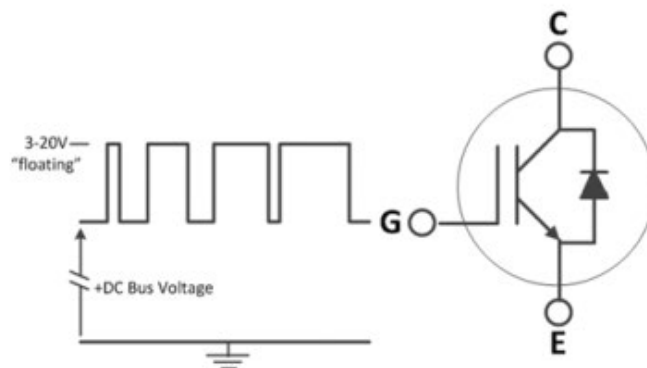


| Input Voltage (Vrms or Vac) | Input Voltage (Vpk-pk) | DC Bus Voltage (Vdc) | Output PWM Voltage (Vpk) |
|-----------------------------|------------------------|----------------------|--------------------------|
| 120                         | 340                    | 170                  | 170                      |
| 240                         | 680                    | 340                  | 340                      |

## MOSFET/IGBT Devices

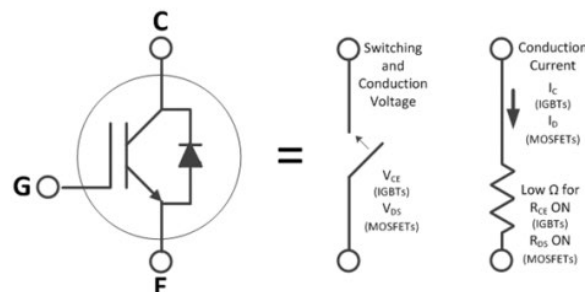
### Gate Drive Voltage Measurements

Typically from 3 to 20 volts and “floating” at up to the DC Bus voltage. Safe and accurate measurements require a probe that is safety rated to the full DC bus voltage, has low additive noise, excellent CMRR, and a suitable low-voltage gain range with very high offset capability. The HVD Series probes provide all of these capabilities.



### Device Analysis

Conduction loss or R<sub>ds(on)</sub> measurements require a voltage probing solution that has high CMRR, fast overdrive recovery, voltage clamping (so the oscilloscope is not overdriven), compensation flatness, gain/amplification to see small signal details, and precise offset generation to see the switching device's turn-off performance. For this type of analysis, the Teledyne LeCroy DA1855A Differential Amplifier is the best solution. It provides 100 MHz bandwidth, excellent common mode rejection ratio (CMRR) of 100,000:1 (typical), and overdrive recovery to within 100 mV from a 400 V input signal in less than 100 ns.



DA1855A  
Differential Amplifier

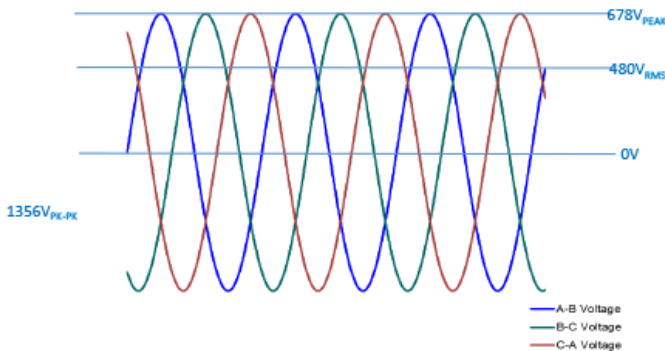
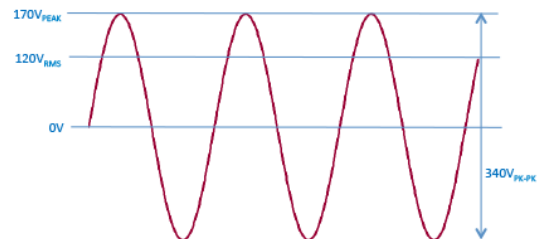
# UNDERSTANDING HV DIFFERENTIAL PROBE RATINGS

AC line voltages and power electronics systems can operate at very high voltages, and all parts of the measurement circuit are not necessarily connected to ground, requiring HV safety ratings. Additionally, a variety of terms may be used to describe the same voltage. Below is a simple tutorial to help you understand the various types of voltage terms and how they relate to each other. Understanding these voltage terms is necessary to ensure the correct probe selection.

## Single-phase AC Line Input

Ratings are provided in  $V_{rms}$  (also referred to as  $V_{ac}$ ) referred Line-Neutral. AC Line inputs are usually grounded and these voltages can be assumed to have a 0V reference voltage.

$V_{peak}$  is calculated as  $\sqrt{2} \cdot V_{rms}$  and  $V_{pk-pk}$  is calculated as  $2 \cdot V_{peak}$ . The example to the right is for a 120  $V_{rms}$  rating.

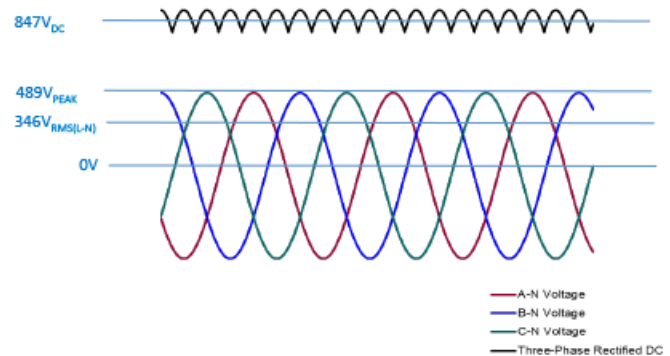


## Three-phase AC Line Input

Ratings are provided in  $V_{rms}$  (also referred to as  $V_{ac}$ ) referred Line-Line (L-L), which can be converted in magnitude to a Line-Neutral basis by dividing by  $\sqrt{3}$ .  $V_{peak}$  (L-L) is calculated  $\sqrt{2} \cdot V_{rms}$  and  $V_{pk-pk}$  is calculated as  $2 \cdot V_{peak}$ . The example on the left is for a 480  $V_{rms}$  three-phase rated system with signals shown as Line-Line.

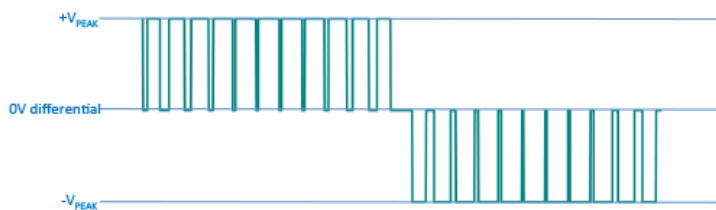
## Rectified AC (DC Bus/Link Voltage)

For three-phase inputs, the three Line-Neutral (L-N) AC Line inputs are rectified and summed to provide a "stiff" DC (bus/link) voltage for the input to an inverter subsection. The example shown to the right is for a 600  $V_{rms}$  system. The Line-Neutral RMS voltages are  $600V/\sqrt{3}$ , and each  $V_{peak}(L-N)$  is calculated as  $\sqrt{2} \cdot V_{rms}$ . The DC bus voltage after rectification and filtering is equal to  $\sqrt{3} \cdot V_{peak}(L-N)$ , or 849  $V_{DC}$  in this case.



## Inverter or Drive H-Bridge or Cascaded H-Bridge Outputs

The nominal peak voltage (+ or -) of the PWM signals without accounting for signal overshoot is equal to the DC bus voltage. The measured 0V differential voltage value is not ground-referenced, and therefore a differential probe suitably rated to the DC bus voltage is recommended. Note that the  $+V_{peak}$  and  $-V_{peak}$  plus overshoot safety margin (typically ~50%) is what the HV differential probe must measure -  $V_{pk-pk}$  ( $2 \cdot V_{peak}$ ) will never occur in the circuit.



# SPECIFICATIONS

|                                               | HVD3102                                                                                                                                         | HVD3106 | HVD3106-6M |
|-----------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|---------|------------|
| Bandwidth                                     | 25 MHz                                                                                                                                          | 120 MHz | 80 MHz     |
| Rise Time (10-90)                             | 14 ns                                                                                                                                           | 2.9 ns  | 4.4 ns     |
| Differential Voltage Range (High Attenuation) | 1500 V (DC + peak AC) from 7 to 500 V/div with up to 1500 V offset.<br>2000 V maximum typical measurable differential voltage before saturation |         |            |
| Differential Voltage Range (Low Attenuation)  | 27.6 V (DC + peak AC) from 100 mV/div to 6.9 V/div with up to 150 V offset                                                                      |         |            |
| Common Mode Voltage Range                     | ±1500 V (DC + peak AC), 1000 Vrms (CAT III) (either input to ground)                                                                            |         |            |
| Maximum Input Voltage to Earth                | ±1500 Vpk (nominal, either input to ground)                                                                                                     |         |            |
| Max Safe Input Voltage                        | 1000 Vrms CAT III<br>per IEC/EN 61010-031/A1:2008                                                                                               |         |            |

|                                                      |                                                                           |                                                           |                                                           |
|------------------------------------------------------|---------------------------------------------------------------------------|-----------------------------------------------------------|-----------------------------------------------------------|
| Sensitivity                                          | 100 mV/div to 6.9V/div (100X)<br>7V/div to 500V/div (1000X)               | 100 mV/div to 6.9V/div (50X)<br>7V/div to 500V/div (500X) | 100 mV/div to 6.9V/div (50X)<br>7V/div to 500V/div (500X) |
| Gain Accuracy                                        | 1% (LF, guaranteed)                                                       |                                                           |                                                           |
| Slew Rate                                            | 100 V/ns (maximum)                                                        | 400 V/ns (maximum)                                        | 400 V/ns (maximum)                                        |
| Attenuation                                          | 100x / 1000x                                                              | 50x / 500x                                                | 50x / 500x                                                |
| Input Impedance                                      | 10 MΩ    2.5 pF (between inputs), 5 MΩ    5.0 pF (either input to ground) |                                                           |                                                           |
| Input Coupling                                       | DC only                                                                   |                                                           |                                                           |
| Output Coupling                                      | AC or DC coupling                                                         |                                                           |                                                           |
| Output Termination                                   | 1 MΩ                                                                      |                                                           |                                                           |
| Interface                                            | ProBus                                                                    |                                                           |                                                           |
| Input Lead Length                                    | 40 cm input lead length                                                   |                                                           |                                                           |
| Cable Length (input lead to oscilloscope connection) | 2.25 m                                                                    |                                                           | 6.8 m                                                     |

## Noise and Rejection

|                |                                                                    |                                                                                      |                                                                                     |
|----------------|--------------------------------------------------------------------|--------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| CMRR (Typical) | DC - 60 Hz: 85 dB<br>1 MHz: 65 dB<br>5 MHz: 40 dB<br>20 MHz: 30 dB | DC - 60 Hz: 85 dB<br>1 MHz: 65 dB<br>5 MHz: 40 dB<br>20 MHz: 30 dB<br>100 MHz: 30 dB | DC - 60 Hz: 85 dB<br>1 MHz: 65 dB<br>5 MHz: 40 dB<br>20 MHz: 30 dB<br>80 MHz: 30 dB |
| Noise (Probe)  | 100X: <15 mVrms<br>1000X: <85 mVrms (referred to input)            | 50X: <30 mVrms<br>500X: <150 mVrms (referred to input)                               | 50X: <30 mVrms<br>500X: <150 mVrms (referred to input)                              |

## Environmental

|                             |                                                                                 |
|-----------------------------|---------------------------------------------------------------------------------|
| Temperature (Operating)     | 0°C to 50°C                                                                     |
| Temperature (Non-Operating) | -40°C to 70°C                                                                   |
| Humidity (Operating)        | 5% to 80% RH (Non-Condensing) up to 30°C, decreasing linearly to 45% RH at 50°C |
| Humidity (Non-Operating)    | 5% to 95% RH (Non-Condensing), 75% RH above 30°C, 45% RH above 40°C             |
| Altitude (Operating)        | 3000 m maximum<br>When used with clip accessories, 2000 m maximum               |
| Altitude (Non-Operating)    | 10,000 m                                                                        |
| Pollution Degree            | 2, Indoor use only                                                              |

## Certifications

|                                |                                                                          |
|--------------------------------|--------------------------------------------------------------------------|
| CE (LVD Directive 2006/95/EC)  | IEC/EN 61010-031/A1:2008, Pending IEC/EN 61010-031:2015                  |
| CE (EMC Directive 2004/108/EC) | IEC/EN 61326-1:2013                                                      |
| UL Listed                      | UL 61010-031 (First Edition), Pending UL 61010-031 (Second Edition)      |
| cUL Listed                     | CAN/CSA - C22.2 No. 61010-031-07, Pending CAN/CSA-C22.2 No. 61010-031-15 |

# SPECIFICATIONS

|                                                      | HVD3206                                                                                                                                                                                          | HVD3605                                                                                                                                                                                                                    |
|------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Bandwidth                                            | 120 MHz                                                                                                                                                                                          | 100 MHz                                                                                                                                                                                                                    |
| Rise Time (10-90)                                    | 2.9 ns                                                                                                                                                                                           | 4.3 ns                                                                                                                                                                                                                     |
| Differential Voltage Range (High Attenuation)        | 2000 V (DC + peak AC) from 7 to 500 V/div with up to 1500V offset.                                                                                                                               | 7000 V (DC + peak AC) from 28V/div to 2000 V/div with up to 6000V offset.<br>(7600 V maximum measurable differential voltage before saturation)                                                                            |
| Differential Voltage Range (Low Attenuation)         | 27.6 V (DC + peak AC) from 100 mV/div to 6.9 V/div with up to 150V offset.                                                                                                                       | 700 V (DC + peak AC) from 300mV/div to 27.5 V/div with up to 600V offset.                                                                                                                                                  |
| Common Mode Voltage Range                            | ±2000 V (DC + peak AC)                                                                                                                                                                           | ±7600V (DC + peak AC), 6000 Vrms                                                                                                                                                                                           |
| Maximum Input Voltage to Earth                       | ±2000 Vpk<br>(nominal, either input to ground)                                                                                                                                                   | ±7600 Vpk<br>(nominal, either input to ground)                                                                                                                                                                             |
| Max Safe Input Voltage                               | 2000 V (DC + peak AC) CAT I<br>per IEC/EN 61010-031/A1:2008,<br>"O" Category (pending) per IEC/EN 61010-031:2015<br>1500 Vdc CAT III<br>(pending) per IEC/EN 61010-031:2015<br>1000 Vrms CAT III | 8485 V (DC + peak AC)<br>6000 Vrms<br>Both ratings CAT I per IEC/EN 61010-031/A1:2008,<br>"O" Category (pending) per IEC/EN 61010-031:2015<br>1500 Vdc CAT III<br>(pending) per IEC/EN 61010-031:2015<br>1000 Vrms CAT III |
| Sensitivity                                          | 100 mV/div to 6.9V/div (50X)<br>7V/div to 500V/div (500X)                                                                                                                                        | 300 mV/div to 27.5 V/div (200X)<br>28 V/div to 2000 V/div (2000X)                                                                                                                                                          |
| Gain Accuracy                                        | 1% (LF, guaranteed)                                                                                                                                                                              |                                                                                                                                                                                                                            |
| Slew Rate                                            | 400 V/ns (maximum)                                                                                                                                                                               | 1000 V/ns (typical)                                                                                                                                                                                                        |
| Attenuation                                          | 50x / 500x                                                                                                                                                                                       | 200x / 2000x                                                                                                                                                                                                               |
| Input Impedance                                      | 10 MΩ    2.5 pF (between inputs)<br>5 MΩ    5.0 pF (either input to ground)                                                                                                                      | 48 MΩ    2.5 pF (between inputs)<br>24 MΩ    5.0 pF (either input to ground)                                                                                                                                               |
| Input Coupling                                       | DC only                                                                                                                                                                                          |                                                                                                                                                                                                                            |
| Output Coupling                                      | AC or DC coupling                                                                                                                                                                                |                                                                                                                                                                                                                            |
| Output Termination                                   | 1 MΩ                                                                                                                                                                                             |                                                                                                                                                                                                                            |
| Interface                                            | ProBus                                                                                                                                                                                           |                                                                                                                                                                                                                            |
| Input Lead Length                                    | 40 cm input lead length                                                                                                                                                                          |                                                                                                                                                                                                                            |
| Cable Length (input lead to oscilloscope connection) | 2.25 m                                                                                                                                                                                           | 6.8 m                                                                                                                                                                                                                      |

## Noise and Rejection

|                |                                                                                      |                                                                                                                                                      |
|----------------|--------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|
| CMRR (Typical) | DC - 60 Hz: 85 dB<br>1 MHz: 65 dB<br>5 MHz: 40 dB<br>20 MHz: 30 dB<br>100 MHz: 30 dB | DC - 60 Hz: 85 dB<br>10 kHz: 70 dB<br>1 MHz: 64 dB (200x)<br>1 MHz: 50 dB (2000x)<br>10 MHz: 40 dB (200x)<br>10 MHz: 30 dB (2000x)<br>100 MHz: 30 dB |
| Noise (Probe)  | 50X: <30 mVrms<br>500X: <150 mVrms<br>(referred to input)                            | 200x: <65 mVrms<br>2000x: <320 mVrms<br>(typical, referred to input)                                                                                 |

## Environmental

|                             |                                                                                 |
|-----------------------------|---------------------------------------------------------------------------------|
| Temperature (Operating)     | 0°C to 50°C                                                                     |
| Temperature (Non-Operating) | -40°C to 70°C                                                                   |
| Humidity (Operating)        | 5% to 80% RH (Non-Condensing) up to 30°C, decreasing linearly to 45% RH at 50°C |
| Humidity (Non-Operating)    | 5% to 95% RH (Non-Condensing), 75% RH above 30°C, 45% RH above 40°C             |
| Altitude (Operating)        | 3000 m maximum<br>When used with clip accessories, 2000 m maximum               |
| Altitude (Non-Operating)    | 10,000 m                                                                        |
| Pollution Degree            | 2, Indoor use only                                                              |

## Certifications

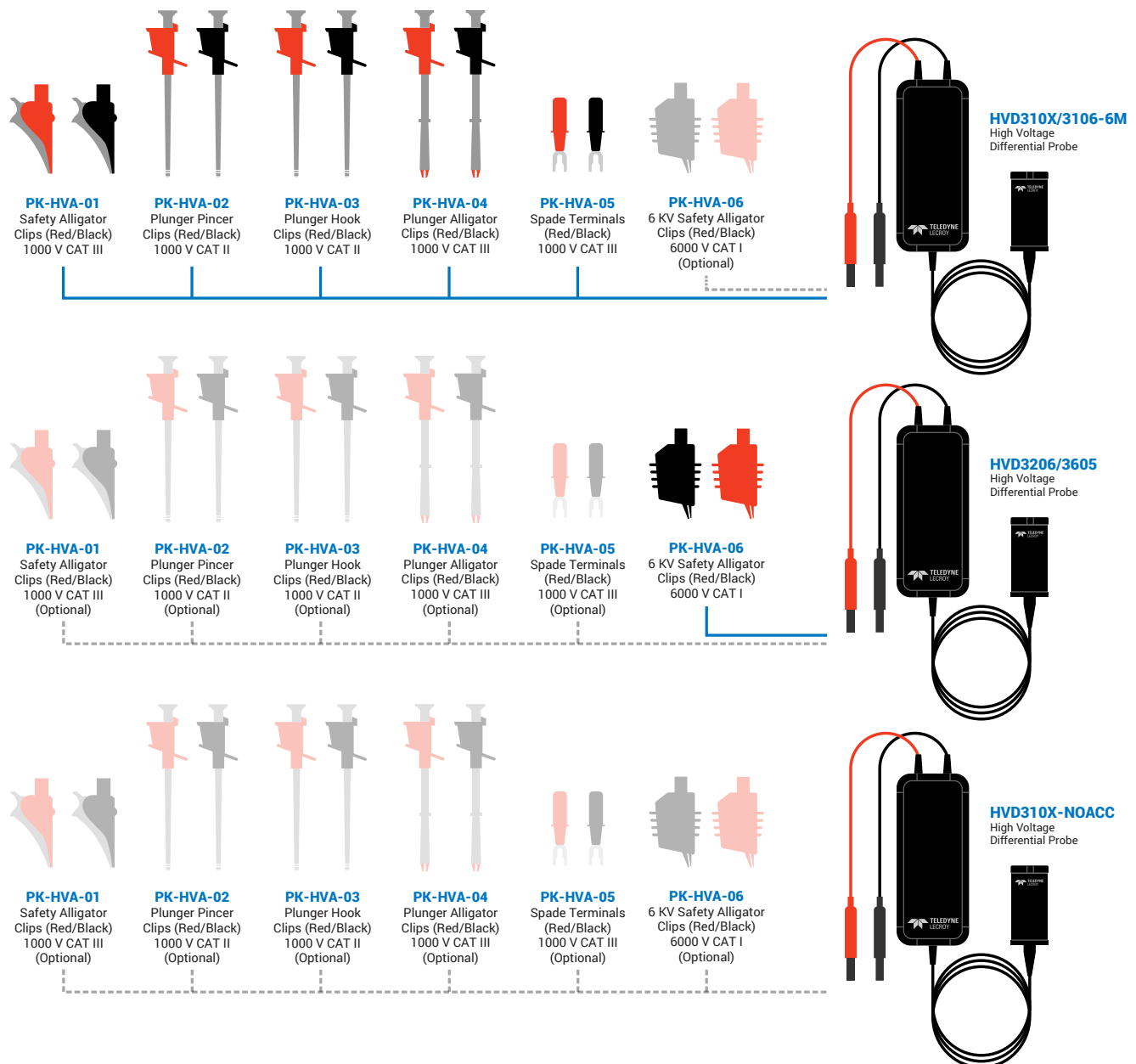
|                                |                                                                          |
|--------------------------------|--------------------------------------------------------------------------|
| CE (LVD Directive 2006/95/EC)  | IEC/EN 61010-031/A1:2008, Pending IEC/EN 61010-031:2015                  |
| CE (EMC Directive 2004/108/EC) | IEC/EN 61326-1:2013                                                      |
| UL Listed                      | UL 61010-031 (First Edition), Pending UL 61010-031 (Second Edition)      |
| cUL Listed                     | CAN/CSA - C22.2 No. 61010-031-07, Pending CAN/CSA-C22.2 No. 61010-031-15 |

# ORDERING INFORMATION

## Product Description

|                                                                                                                                                                                           |               |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|
| 1 kV, 25 MHz High Voltage Differential Probe with 2 m cable                                                                                                                               | HVD3102       |
| 1 kV, 120 MHz High Voltage Differential Probe with 2 m cable                                                                                                                              | HVD3106       |
| 1 kV, 80 MHz High Voltage Differential Probe with 6m cable                                                                                                                                | HVD3106-6M    |
| 1 kV, 25 MHz High Voltage Differential Probe with 2 m cable without tip Accessories                                                                                                       | HVD3102-NOACC |
| 1 kV, 120 MHz High Voltage Differential Probe with 2 m cable without tip Accessories                                                                                                      | HVD3106-NOACC |
| 2 kV, 120 MHz High Voltage Differential Probe with 2 m cable                                                                                                                              | HVD3206       |
| 6 kV, 100 MHz High Voltage Differential Probe with 6 m cable                                                                                                                              | HVD3605       |
| High Voltage Replacement Accessories Kit (Includes 2 each, 1 Black, 1 Red):<br>Safety Alligator Clips, Plunger Pincer Clips, Plunger Hook Clips, Plunger Alligator Clips, Spade Terminals | PK-HV-001     |

## Product Code



## Customer Service

Teledyne LeCroy oscilloscopes and probes are designed, built, and tested to ensure high reliability. In the unlikely event you experience difficulties, our digital oscilloscopes are fully warranted for three years and our probes are warranted for one year. This warranty includes:

- No charge for return shipping
- Long-term 7-year support
- Upgrade to latest software at no charge



1-800-5-LeCroy  
teledynelecroy.com

Local sales offices are located throughout the world.  
Visit our website to find the most convenient location.

## Данный компонент на территории Российской Федерации

**Вы можете приобрести в компании MosChip.**

Для оперативного оформления запроса Вам необходимо перейти по данной ссылке:

<http://moschip.ru/get-element>

Вы можете разместить у нас заказ для любого Вашего проекта, будь то серийное производство или разработка единичного прибора.

В нашем ассортименте представлены ведущие мировые производители активных и пассивных электронных компонентов.

Нашей специализацией является поставка электронной компонентной базы двойного назначения, продукции таких производителей как XILINX, Intel (ex.ALTERA), Vicor, Microchip, Texas Instruments, Analog Devices, Mini-Circuits, Amphenol, Glenair.

Сотрудничество с глобальными дистрибьюторами электронных компонентов, предоставляет возможность заказывать и получать с международных складов практически любой перечень компонентов в оптимальные для Вас сроки.

На всех этапах разработки и производства наши партнеры могут получить квалифицированную поддержку опытных инженеров.

Система менеджмента качества компании отвечает требованиям в соответствии с ГОСТ Р ИСО 9001, ГОСТ РВ 0015-002 и ЭС РД 009

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