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Data Sheet

August 14, 2026

AGILENT / KEYSIGHT

Agilent/Keysight U2653A

Agilent Keysight U2653A USB Modular Isolated 64-bit Digital Output The Agilent/Keysight U2653A is the 64-bit isolated digital-output member of the U2600A Series USB modular DIO family (with U2651A 32-in/32-out and U2652A 64-in). OEM data sheet 5991-0665 lists 64 opto-isolated open-drain MOSFET outputs, 5 V to 35 V external load supply, VDrop less than 1.0 V, 500 mA per bit at 100 percent duty cycle, 1250 Vpeak transient isolation, onboard isolated plus 5 V at 150 mA typical (0.85 W), USB 2.0 USBTMC-USB488, and a 100-pin SCSI-II connector. The Agilent/Keysight U2653A is the 64-bit isolated digital-output member of the U2600A Series USB modular DIO family (with U2651A 32-in/32-out and U2652A 64-in). OEM data sheet 5991-0665 lists 64 opto-isolated open-drain MOSFET outputs, 5 V to 35 V external load supply, VDrop less than 1.0 V, 500 mA per bit at 100 percent duty cycle, 1250 Vpeak transient isolation, onboard isolated plus 5 V at 150 mA typical (0.85 W), USB 2.0 USBTMC-USB488, and a 100-pin SCSI-II connector. Industrial USB automation driving relays, actuators, and valves; education labs; standalone or U2781A-class USB modular chassis use.

**MODEL****Agilent / Keysight
U2653A****CALIBRATION****Available on
request****CONDITION****Used****STATUS****In stock****RFQ / SKU****U2653A****LISTING**<https://aumictechlabs.com/products/u2653a-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Keysight U2653A is a USB modular digital output device delivering 64 channels of opto-isolated outputs for high-noise data acquisition environments. Built on the U2600A Series

platform, this instrument provides 1250 Vrms isolation protection to safeguard systems and connected equipment from voltage surges and ground loops. The module connects via USB 2.0 High Speed as a USBTMC Class device and operates from a +12 VDC supply drawing 260 mA maximum. Technical Specifications Output Channels: 64 opto-isolated digital outputs Maximum Output Voltage: 35 V Isolation Protection: 1250 Vrms Interface: USB 2.0 High Speed, USBTMC Class Connector: 100-pin SCSI-II Power Supply: +12 VDC at 2 A maximum input current Power Consumption: 260 mA (maximum at +12 VDC) Operating Temperature: 0 °C to +55 °C Operating Humidity: 15% to 85% RH (non-condensing) Altitude: Up to 2000 meters Storage Temperature: – 20 °C to +70 °C Module Dimensions (with casing): 120.00 mm × 182.40 mm × 44.00 mm Module Dimensions (without casing): 105.00 mm × 174.54 mm × 25.00 mm Module Weight (with casing): 535 g Module Weight (without casing): 370 g Key Features Standalone or modular operation Interrupt function capability Virtual Port grouping function Opto-isolated output architecture for noise immunity Compatibility & Integration Operating Systems: Microsoft Windows Bundled Software: Keysight Measurement Manager (AMM), BenchVue (BV0025B license) Development Environments: Keysight VEE, MATLAB R2007a, NI LabVIEW, Microsoft Visual Studio Terminal Blocks: Compatible with optional U2903A or U2904A modules (158.00 mm × 118.60 mm × 51.50 mm) Certifications: IEC 61010-1:2001, IEC 61326-1:2002, CISPR 11 Class A, CAN/CSA-C22.2 No. 61010-1-04, ANSI/UL 61010-1:2004

U2653A Characteristics / Specifications

PARAMETER	VALUE
Instrument Type	USB modular isolated digital output
Series Family	Keysight U2600A (U2651A / U2652A / U2653A)
Digital Output Bits	64 isolated bits (no digital inputs on U2653A)
Output Type	open drain power MOSFET driver
External Supply Voltage	5 V to 35 V
Voltage Drop Mosfet On	VDrop less than 1.0 V maximum
Output Sink Current Per Bit	500 mA at 100 percent duty cycle per bit
Maximum Transient Voltage	1250 Vpeak
Onboard Isolated Supply Voltage	plus 5 V typical
Onboard Isolated Supply Current	150 mA typical
Onboard Isolated Supply Power	0.85 W maximum
Power Consumption	plus 12 V at 260 mA typical
Operating Temperature	0 to plus 55 C
Storage Temperature	minus 20 to plus 70 C
Relative Humidity	5 percent to 85 percent at 40 C (storage 90 percent RH at 65 C for 24 hours class in the family table)
Remote Interface	Hi-Speed USB 2.0, USBTMC-USB488
Io Connector	100-pin SCSI-II
Terminal Accessory 1 M	U2903A terminal block and SCSI-II cable 1 m
Terminal Accessory 2 M	U2904A terminal block and SCSI-II cable 2 m
Package Form	USB modular (standalone or chassis)
Literature	Keysight U2600A Series USB Modular Isolated Digital I/O Devices data sheet 5991-0665
Related U2651A	32-bit DI plus 32-bit DO
Related U2652A	64-bit DI
Usb Speed	480 Mbit/s Hi-Speed

PARAMETER	VALUE
Humidity	5 percent to 85 percent at 40 C (storage 90 percent RH at 65 C for 24 hours class in the family table)

U2653A Specifications

PARAMETER	VALUE
Applications	Industrial USB automation driving relays, actuators, and valves; education labs; standalone or U2781A-class USB modular chassis use.
Key Features	64 opto-isolated digital outputs
Onboard isolated 5 V for simple function tests	Hi-Speed USB 2.0 (480 Mbit/s) USBTMC
Technical Specifications	Instrument Type: USB modular isolated digital output

General Specifications & Supplementary Characteristics

PARAMETER	VALUE
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Usb Speed	480 Mbit/s Hi-Speed Notes Output, isolation, supply, and environment rows from Keysight U2600A Series data sheet 5991-0665 U2653A column. Digital-input rows apply only to U2651A/U2652A and are omitted here.

Full OEM specifications

Complete technical content extracted from the manufacturer datasheet. Sparse OEM tables are reconstructed as tables below; other text is preserved as paragraphs.

Specifications	
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Notes

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Available from Aumictech

Used and refurbished unit evaluated in-house. Calibration: Available on request. Used · In stock.

Request a quote: sales@aumictech.com · +1 (484) 841-9341

Aumictech

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Technical content from manufacturer specifications. Unit photo/stock from Aumictech listing when available. Specifications subject to OEM documentation and unit condition.