Acuity®

Productivity through Precision®

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Acuity® AR700 Ordering Guide

AR700 Sensor Part Number Information

AR700

Part#	Description
	AR700-0125 Laser Sensors
AP7010001	AR700-0125, 3.175mm Span, 1mW Visible, 83mm Case, 2m Cable
	AR700-0250 Laser Sensors
AP7010002	AR700-0250, 6.35mm Span, 1mW Visible, 83mm Case, 2m Cable
	AR700-0500 Laser Sensors
AP7010005	AR700-0500, 12.7mm Span, 1mW Visible, 83mm Case, 2m Cable
	AR700-1 Laser Sensors
AP7010010	AR700-1, 25.4mm Span, 1mW Visible, 83mm Case, 2m Cable
	AR700-2 Laser Sensors
AP7010020	AR700-2, 50.8mm Span, 1mW Visible, 83mm Case, 2m Cable
AP7020020	AR700-2, 50.8mm Span, 5mW Visible, 83mm Case, 2m Cable
	AR700-4 Laser Sensors
AP7010040	AR700-4, 101.6mm Span, 1mW Visible, 83mm Case, 2m Cable, w/o Bandpass Filter
AP7020040	AR700-4, 101.6mm Span, 5mW Visible, 83mm Case, 2m Cable, w/o Bandpass Filter
AP7022040	AR700-4, 101.6mm Span, 5mW Visible, 83mm Case, 2m Cable, w/ Bandpass Filter
AP7034040	AR700-4RP, 101.6mm Span, 20mW Visible, 83mm Case, 2m Cable, w/ Bandpass Filter
	AR700-6 Laser Sensors
AP7220060	AR700-6, 152.4mm Span, 5mW Visible, 132mm Case, 2m Cable, w/o Bandpass Filter
AP7222060	AR700-6, 152.4mm Span, 5mW Visible, 132mm Case, 2m Cable, w/ Bandpass Filter
AP7234060	AR700-6RP, Road Profile Option, 152.4mm Span, 20mW Visible, 132mm Case, 2m Cable, w/ Bandpass Filter
	AR700-8 Laser Sensors
AP7220080	AR700-8, 203.2mm Span, 5mW Visible, 132mm Case, 2m Cable, w/o Bandpass Filter
AP7230080	AR700-8, 203.2mm Span, 20mW Visible, 132mm Case, 2m Cable, w/o Bandpass Filter
AP7222080	AR700-8, 203.2mm Span, 5mW Visible, 132mm Case, 2m Cable, w/ Bandpass Filter
AP7232080	AR700-8, 203.2mm Span, 20mW Visible, 132mm Case, 2m Cable, w/ Bandpass Filter
AP7234080	AR700-8RP, Road Profile Option, 203.2mm Span, 20mW Visible, 132mm Case, 2m Cable, w/ Bandpass Filter
	AR700-12 Laser Sensors
AP7220120	AR700-12, 304.8mm Span, 5mW Visible, 132mm Case, 2m Cable, w/o Bandpass Filter
AP7230120	AR700-12, 304.8mm Span, 20mW Visible, 132mm Case, 2m Cable, w/o Bandpass Filter
AP7420120	AR700-12, 304.8mm Span, 5mW Visible, 257mm Case, 2m Cable, w/o Bandpass Filter
AP7430120	AR700-12, 304.8mm Span, 20mW Visible, 257mm Case, 2m Cable, w/o Bandpass Filter
AP7422120	AR700-12, 304.8mm Span, 5mW Visible, 257mm Case, 2m Cable, w/ Bandpass Filter
AP7432120	AR700-12, 304.8mm Span, 20mW Visible, 257mm Case, 2m Cable, w/ Bandpass Filter
AP7434120	AR700-12RP, Road Profile Option, 304.8mm Span, 20mW Visible, 257mm Case, 2m Cable, w/ Bandpass Filter
	AR700-16 Laser Sensors
AP7420160	AR700-16, 406.4mm Span, 5mW Visible, 257mm Case, 2m Cable, w/o Bandpass Filter
AP7430160	AR700-16, 406.4mm Span, 20mW Visible, 257mm Case, 2m Cable, w/o Bandpass Filter
AP7422160	AR700-16, 406.4mm Span, 5mW Visible, 257mm Case, 2m Cable, w/ Bandpass Filter
AP7432160	AR700-16, 406.4mm Span, 20mW Visible, 257mm Case, 2m Cable, w/ Bandpass Filter
AP7434160	AR700-16RP, Road Profile Option, 406.4mm Span, 20mW Visible, 257mm Case, 2m Cable, w/ Bandpass Filter
	AR700-24 Laser Sensors
AP7620240	AR700-24, 609.6mm Span, 5mW Visible, 485mm Case, 2m Cable, w/o Bandpass Filter
AP7630240	AR700-24, 609.6mm Span, 20mW Visible, 485mm Case, 2m Cable, w/o Bandpass Filter
AP7622240	AR700-24, 609.6mm Span, 5mW Visible, 485mm Case, 2m Cable, w/ Bandpass Filter
AP7632240	AR700-24, 609.6mm Span, 20mW Visible, 485mm Case, 2m Cable, w/ Bandpass Filter
	AR700-32 Laser Sensors
AP7620320	AR700-32, 812.8mm Span, 5mW Visible, 485mm Case, 2m Cable, w/o Bandpass Filter
AP7630320	AR700-32, 812.8mm Span, 20mW Visible, 485mm Case, 2m Cable, w/o Bandpass Filter
AP7622320	AR700-32, 812.8mm Span, 5mW Visible, 485mm Case, 2m Cable, w/ Bandpass Filter
AP7632320	AR700-32, 812.8mm Span, 20mW Visible, 485mm Case, 2m Cable, w/ Bandpass Filter
	AR700-50 Laser Sensors
AP7620500	AR700-50, 1.27m Span, 5mW Visible, 485mm Case, 2m Cable, w/o Bandpass Filter
AP7630500	AR700-50, 1.27m Span, 20mW Visible, 485mm Case, 2m Cable, w/o Bandpass Filter
AP7622500	AR700-50, 1.27m Span, 5mW Visible, 485mm Case, 2m Cable, w/ Bandpass Filter
AP7632500	AR700-50, 1.27m Span, 20mW Visible, 485mm Case, 2m Cable, w/ Bandpass Filter

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AR700 Accessory Part Number Information

Part#	Description
AR700 (Continued)	
	AR700 Connectivity Kits
AQ7000001	Connectivity Kit w/DB9 Serial Cable for AR700 with Class 2, 3R Lasers – US Plug
AQ7000002	Connectivity Kit w/DB9 Serial Cable for AR700 with Class 2, 3R Lasers – EU Plug
AQ7000005	Connectivity Kit w/Serial to USB Adapter for AR700 with Class 2, 3R Lasers – US Plug
AQ7000006	Connectivity Kit w/Serial to USB Adapter for AR700 with Class 2, 3R Lasers – EU Plug
AQ7000008	Connectivity Kit w/DB9 Serial Cable for AR700 with Single Point Thickness 100V-240V US Connectivity Kit – US Plug
	AR700 Touch Panel Display
AQ9900008	Touch Panel Display – 8" Screen
	AR700 Cables
CBA700205	AR700 Cable Assembly 5M Quick Disconnect, Straight Connector, Flying Leads
CBA700210	AR700 Cable Assembly 10M Quick Disconnect, Straight Connector, Flying Leads
CBA700305	AR700 Cable Assembly 5M Quick Disconnect, Right Angle Connector, Flying Leads
CBA700310	AR700 Cable Assembly 10M Quick Disconnect, Right Angle Connector, Flying Leads

* Cables need to be selected and included in your order.

Ordering Descriptions

Bandpass Filter: Internally installed. Suggested for outdoor applications or when measuring to bright or radiating targets.

Higher Laser Power: Diode upgrades to visible red 20mW (660 nm, Class 3B) for high sample rates on dark surfaces or in high ambient light.

Road Profiling Option: Package for AR700-6 or -8. Includes specialized optics, upgraded diode, bandpass filter and signal processing firmware optimized for use in high-speed longitudinal road surface profiling.

Cables: AR700 cables must be ordered separately from the sensor. For custom cable requirements, please let us know.

Connectivity Kits: Acuity sells a connectivity kit to aid in connecting your laser to a power supply and serial port. This product includes a 120V, 15 VDC, AC power supply; a serial cable with DB9 connector; and a solid-state, NEMA-4X interface box. The interface box includes two sets of terminal blocks for simple input (from sensor) and output (to your selected device), a DB9 male serial connector out, and a barrel style power connector in. You can either pass through the wiring to another unterminated cable, connect a DB9 serial cable directly to the interface box, or both at the same time.

    AQ7000001 – 120 V version with an US-style plug
    AQ7000002 – 240 V version with a European-style plug
    AQ7000005 – w/ serial to USB cable for ease of connection into industrial computers - US plug
    AQ7000006 – w/ serial to USB cable for ease of connection into industrial computers - Euro plug
    AQ7000008 – special connectivity kit with logic to use AR700 triggers to synchronize two AR700s for single point thickness measurement – US plug

Touch Panel Display (AQ9900008): Stand-alone terminal interface for use with Acuity laser distance sensors. These fully enclosed units replace panel meters, alphanumeric displays, and analog controllers by providing a modern interface through a full-color LCD and touch screen. The Touch Panel Display communicates with one to six Acuity sensors or using RS-232 serial interfaces. The touch panel can be easily configured using on-screen buttons to display, scale, and even graph the sensors' distance outputs. Relative dimensions can be measured using a tare function. With two Acuity sensors, the touch panel can serve as a thickness gauge. Limits can be programmed into the touch panel to give a visual warning to operators that the target is too close or too far or too thick or too thin. With a USB flash drive, measurements can be logged and saved for further analysis.