

# **Agilent Remote Link**

### **Data Sheet**

The remote link solution — Agilent's next generation wireless connectivity solution lets you measure further, easier and faster. With the new U1117A IR-to-*Bluetooth*® adapter and U1115A remote logging display, you get instant wireless *Bluetooth* connection and measure safely from an extended distance.

- Extended measurement distance of up to 100 meters
- Supported on both iOS/Android based smart device\*\*
- · View readings of up to four handheld meters simultaneously\*
- Compatible with Agilent U1117A / U1177A IR-to-Bluetooth Adapter
- 60,000 points interval logging\*
- Download logged data to a Windows PC via Bluetooth connection\*
- Micro USB external power port\*
- Indoor and outdoor viewing mode\*
- Compatible with ALL Agilent's U1200 Series handheld meters\*
  - \* U1115A only
  - \*\* U1117A only





#### Improve work safety with 10 times MORE distance

On site testing in large industrial site can be challenging and hazardous when dealing with live machineries or high voltage equipment. By connecting your handheld meter to the remote link solution — U1117A IR-to-*Bluetooth* adapter and U1115A remote logging display, you can view and log measurements wirelessly up to 100 meters away. Get more wireless measurement distance to diagnose and evaluate live machinery from afar without having to be physically present — ensuring your safety and comfort level.

#### Compatible with MORE handhelds

The remote link is able to communicate via *Bluetooth* to 20 Agilent U1200 Series handheld meters, including the new U1450/U1460A series insulation resistance testers. Now you can save investment cost by using existing Agilent handheld meters that you have already owned. The wide selection of handheld meters cater to various application needs to get real-time measurements from a basic, compact and low cost handheld meters.



Figure 1. Communicate via Bluetooth to all existing Agilent U1200 series handheld meters, including the U1450A/U1460A series insulation resistance testers

#### Support MORE display devices

The remote link solution offers versatility to work with more display devices. Now you can log and display measurement readings either on the U1115A remote logging display, via iOS and Android smart devices or on a Windows PC. With the wide supportability range, it allows you to multi-task by being able to measure various test points at the same time.

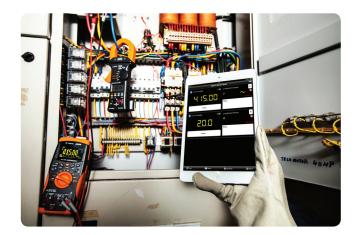


Figure 2. Monitoring handheld multimeter and clamp meter readings remotely via iOS/Android based smart devices

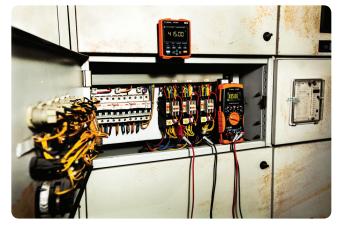


Figure 3. Monitoring handheld meter readings via the U1115A remote logging display

#### New U1117A IR-to-Bluetooth adapter (Class 1)

- · Supports Android and iOS smart devices
- 100 meters measurement range capability (Please refer to the connectivity distance table below)



Figure 4. The U1117A as illustrated

#### Existing U1177A IR-to-Bluetooth adapter (Class 2)

- · Supports Android smart devices
- 10 meters measurement range capability (Please refer to the connectivity distance table below)



Figure 5. The U1177A as illustrated



Figure 6. Multiple awards winning U1177A Infrared (IR)-to-Bluetooth adapter is being recognized as an innovative solution in Test & Measurement industry

	U1177A	U1117A	U1115A
U1177A	_	_	10-m
U1117A	-	_	100-m
U1115A	10-m	100-m	_
Other Class 1 devices	10-m	100-m	100-m
Other Class 2 devices	10-m	10-m	10-m

Figure 7. Connectivity distance (approximate) within the line-of-sight

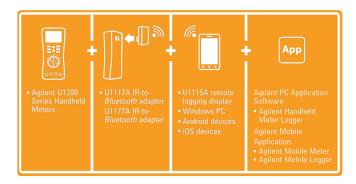


Figure 8. Agilent remote link solution

### U1115A remote logging display





Figure 9. Monitor up to four handheld meters readings at once with the U1115A remote logging display

<sup>\*</sup> All images shown are for illustration purposes only

#### Agilent Mobile Meter Application (iOS/Android)

Monitor up to three multimeter measurements at the same time with Agilent Mobile Meter.



Figure 10. Up to three handheld meters measurements with the Agilent Mobile Meter Application

Agilent Mobile Meter is a free iOS or Android application software that allows iOS or Android based smart devices to connect, control and perform up to three handheld meter measurements.

- Log and monitor up to three measurements simultaneously without the need to be physically present
- · Make measurements from a safe distance
- Eliminates the need to walk back and forth between measurement points
- · Save money, time and achieve higher work productivity

#### Agilent Mobile Logger Application (iOS/Android)

Perform data logging up to three multimeters – wirelessly and simultaneously!



Figure 11. Data logging with Agilent Mobile Logger Application

Agilent Mobile Logger is the free iOS or Android application software that logs data and provides trending graphs from Agilent handheld meters.

- · Capture data streams or plot trending graphs
- · Used for analysis to identify intermittent behavior or detect drifts
- Email functions, Short Message Service (SMS), pan and zoom function via iOS/Android device's touch screen
- · Create mathematical functions and plot trending graphs

#### Agilent Insulation Tester Application (iOS/Android)

## Perform remote testing, data logging and report generation with Agilent Insulation Tester Application



Figure 12. Remote testing and report generation interface on the Agilent Insulation Tester Application



Figure 13. Data logging interface on the Agilent Insulation Tester Application

Agilent Insulation Tester Application is the free iOS or Android application software for the new U1450A/U1460A series insulation resistance testers to perform remote testing, data logging and generate test report via a smart phone or tablet.

- · Acquire and analyze insulation resistance data from a distance
- Eliminates manual data entry errors for report generation
- · Fastest way to generate accurate test reports
- Log data and provide trending graphs to identify intermittent problems (multimeter functionality)
- · Saves money, time and achieve higher work productivity

Agilent Insulation Resistance Tester Application for iOS and Android can be downloaded from www.agilent.com/find/insulationtesterapp or from Google Play Store (https://play.google.com)/
Apple iTunes App Store (https://itunes.apple.com)

#### Agilent Handheld Meter Logger software for Windows PC

The remote link solution also supports data logging and monitoring activities on a Windows PC via downloadable Agilent Handheld Meter Logger software.



Figure 14. View up to 10 handheld meters readings or trendings with Agilent Handheld Meter Logger software

The Agilent Handheld Meter Logger software is a free software compatible with the U1210 Series, U1230 Series, U1240 Series\*, U1250 Series, U1270 Series, and U1450A/U1460A\*\*.



<sup>\*\*</sup> Only allows one connection at a time

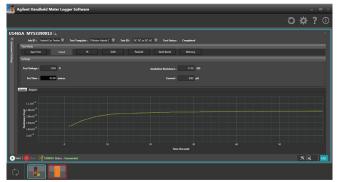


Figure 15. View insulation resistance test trendings and generate test report on a Windows PC

- Connect up to 10 handheld meters 5x IR-to-Bluetooth Adapter (U1177A, U1117A) and 5x IR-USB Cable (U1173B)
- Meter view (live measurements) and Logger view (graph with zoom and pan) mode
- Manage multi-session data logging within the software and export the data to other software (Excel)

# **Specifications**

Product characteristics U1117A		
Radio specification	Frequency: 2402 MHz ~ 2480 MHz Transmit power: +17 dBm Number of channels: 79 Modulation: GFSK/PSK	
Temperature	Operating condition: -20 to 55 °C Storage condition: -40 to 70 °C	
Relative humidity (R.H.)	Operating condition: Up to 80% at 40 °C (non-condensing) Storage condition: Up to 95% at 40 °C (non-condensing)	
Power consumption	Maximum 561 mVA for two 1.5 V AAA batteries	
Battery lifespan	Lithium batteries: 30 hours Alkaline batteries: 20 hours	
Battery type	Lithium 24-LF (ANSI) and FR03 (IEC) Alkaline 24 A (ANSI/NEDA) and LR03 (IEC) Zinc Chloride 24 D (ANSI/NEDA) and R03 (IEC)	
Dimension (W x L x H)	39.0 mm x 71.0 mm x 37.0 mm	
Weight	60 g with batteries	
Warranty	Three months (does not cover normal wear and tear of mechanical parts and batteries)	
Bluetooth	"Bluetooth" Version 2.1 + EDR compliant, SPP profile, Class 1 device (with approximately 100 meters connection range)	
Regulatory	The U1117A complies with the requirements of the following product standards:	
Complies with IDA Standards DB 102425	<ul> <li>EN 301 489-1V1.9.2</li> <li>EN 301 489-17:V2.1.1</li> <li>EN 55022:2006+A1:2007</li> <li>EN55024:1998+A1:2001+A2:2003</li> <li>EN 300 328 V1.7.1 (2006-10)</li> <li>EN 62311:2008</li> <li>EN 60950-1:2006+A11:2009+A12:2011</li> <li>India Equipment Type Approval (ETA) Certificate No: 1424/2011/WRL0</li> <li>COFETEL Certificate No: RCPAGU111-1066, registered under Agilent Technologies Mexico S de RL de CV</li> </ul>	
Compatibility	This telecommunication equipment conforms to the NTC technical requirement  Agilent Handheld Meter/Display:  Agilent U1200 Series Handheld Meters  Agilent U1450A/60A Series Insulation Resistance Testers  Agilent U1115A Remote Logging Display	
	Agilent PC Application Software:  • Agilent Handheld Meter Logger	
	Agilent Mobile Application:  • Agilent Mobile Meter  • Agilent Mobile Logger  • Agilent Insulation Tester	
	Hardware Devices:  iPhone  iPad  iPod Touch  Android smartphone/tablet  Windows PC (with Bluetooth enabled)	

U1117A IR-Bluetooth Adapter is compatible with the U1450A/U1460A series to establish wireless connectivity on a Windows PC or iOS/Android smart devices. U1115A is not compatible with the U1450A/U1460A series.

Product characteristics U1	177A	
Radio specification	Frequency: 2402 MHz ~ 2480 MHz Antenna power: 1 mW or less Number of channels: 79 Modulation: GFSK/PSK	
Temperature	Operating condition: –20 to 55 °C Storage condition: –40 to 70 °C	
Relative humidity (R.H.)	Operating condition: Up to 80% at 40 °C (non-condensing) Storage condition: Up to 95% at 40 °C (non-condensing)	
Power consumption	Maximum 130 mVA for two 1.5 V AAA batteries	
Battery life span	30 hours typical (based on continuous data transfer)	
Battery type	Alkaline 24 A (ANSI/NEDA) and LR03 (IEC) Zinc Chloride 24 D (ANSI/NEDA) and R03 (IEC)	
Dimension (W x L x H)	39.0 mm x 37.0 mm x 71.0 mm	
Weight	60 g with batteries	
Warranty	Three months (does not cover normal wear and tear of mechanical parts and batteries)	
Bluetooth	"Bluetooth" Version 2.1 + EDR compliant, SPP profile, Class 2 device (with 10 meters connection range)	
Regulatory	The U1177A complies with the requirements of the following safety and regulation standards:	
	<ul> <li>FCC Part15C (Certification) (15.209, 15.247) FCC ID: ZKMAGILENT-U1177A</li> <li>FCC Part15B (DoC) (15.109)</li> <li>RSS-210 Issue 8:2010 IC:6310A-U1177A</li> <li>ICES-003 Issue 4:2004</li> <li>EN 300 328 V1.7.1:2008</li> <li>EN 301 489-1V1.8.1:2008/-17 V2.11:2009</li> <li>EN 55022:2006+A1:2007/EN55024:1998+A1:2001+A2:2003</li> <li>EN 50371:2002</li> <li>EN 60950-1:2006/A11:2009/A1:2010</li> <li>Complies with IDA Standards (DB 102425)</li> <li>India Equipment Type Approval (ETA) Certificate No: 1424/2011/WRL0</li> <li>COFETEL Certificate No: RCPAGU111-1066, registered under Agilent Technologies Mexico S de RL de CV</li> </ul>	
Compatibility	This telecommunication equipment conforms to the NTC technical requirement  Agilent Handheld Meter/Display:	
	Hardware Devices:  iPhone  iPad  iPod Touch  Android smartphone/table  Windows PC (with Bluetooth-enabled)	

<sup>1.</sup> U1177A IR-Bluetooth Adapter is compatible with the U1450A/U1460A series to establish wireless connectivity on a Windows PC or iOS/Android smart devices. U1115A is not compatible with the U1450A/U1460A Series

Radio specification	Frequency: 2402 MHz ~ 2480 MHz	
naulo specification	Transmit power: +17 dBm	
	Number of channels: 79	
	Modulation: GFSK/PSK	
Temperature	Operating condition: -20 to 55 °C	
	Storage condition: –40 to 70 °C	
Relative humidity (R.H.)	Operating condition: Up to 80% at 40 °C (non-condensing) Storage condition: Up to 95% at 40 °C (non-condensing)	
Power consumption	Maximum 1 VA for three AA batteries	
	Maximum 5 V +10%, 250 mA for external power Auto Power Off mode, current consumption 3 mA	
D-# l'f		
Battery lifespan	Lithium batteries: 30 hours Alkaline batteries: 20 hours	
Battery type	Lithium 24-LF (ANSI) and FR03 (IEC)	
Dutto. y typo	Alkaline 24 A (ANSI/NEDA) and LR03 (IEC)	
	Zinc Chloride 24 D (ANSI/NEDA) and R03 (IEC)	
Dimension (W x L x H)	92.0 mm x 107.9 mm x 33.5 mm	
Weight	238 g with batteries, 170 g without batteries	
Warranty	One year (does not cover normal wear and tear of mechanical parts and batteries)	
Bluetooth	"Bluetooth" Version 2.1 + EDR compliant, SPP profile, Class 1 device (with approximately 100 meters connection range)	
Regulatory	The U1115A complies with the requirements of the following product standards:	
	• EN 301 489-1:V1.9.2	
	• EN 301 489-17:V2.1.1	
	<ul> <li>EN 55022:2006+A1:2007+A2:2010 (Group 1 Class A)</li> <li>EN55024:1998+A1:2001+A2:2003+A3:2010</li> </ul>	
	• EN 300 328 V1.7.1 (2006-10)	
	• EN 62311:2008	
	• EN 60950-1:2006+A11:2009+A1:2010+A12:2011	
	This telecommunication equipment conforms to the NTC technical requirement	
Compatibility	Agilent Handheld Meter/Display:	
	Agilent U1200 Series Handheld Meters     Agilent U1117A IP to Plustooth Adenter	
	<ul> <li>Agilent U1117A IR-to-Bluetooth Adapter</li> <li>Agilent U1177A IR-to-Bluetooth Adapter</li> </ul>	
	Agilent PC Application Software:	
	Agilent Handheld Meter Logger <sup>1</sup>	
	Hardware Device:	
	Windows PC (with Bluetooth enabled)	
	Note: U1115A is not compatible with U1450A/60A series	

<sup>1.</sup> Transfers logged data from U1115A remote logging display to Windows PC

## **Ordering information**

#### Standard shipped accessories

U1115A Remote Logging Display



- Three 1.5 V AA batteries.USB to micro USB cable (for external power only).
- · Soft Carrying Case
- Operating instruction

U1117A IR-to-Bluetooth adapter



- · Two 1.5 V AAA batteries
- · Operating instruction

U1177A IR-to-Bluetooth adapter



- · Two 1.5 V AAA batteries
- · Operating instruction