

G1390A Agilent 1100 Series Universal Interface Box (UIB)

The G1390A is needed for the Agilent 1100 Series LC-MSD (G1946 C/D), the 1100 Series FLD (G1321A), the 1100 Series RID (G1362A) and third-party detectors, if they are operated as peak detectors for peak triggering in combination with the 1100 Series Fraction Collector (G1364A). The G1390A is not needed for the 1100 Series VWD (G1314A), MWD(G1365A/B), DAD (G1315A/B). Communication with and control of these detectors is performed via the standard 1100 CAN communication system.

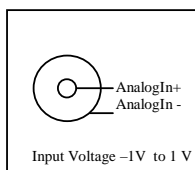
Features:

- Analog Input for peak based fraction triggering (Threshold, Slope)
- Minimum Peak width > 1 sec.
- GPIO Interface for digital fraction triggering
- 4 Relay Contacts for fraction tick marks
- 2 CAN connectors for connection to the 1100 Series system or modules

Table 1

Connector Descriptions:





Analog-In



GPIO / Analog-In

PIN	Function
1	GPIO1
2	GPIO2
3	GPIO3
4	GPIO4
5	GPIO5
6	GPIO6
7	GPIO7
8	GPIO8
9	Digital-GND
10	GPIO9
11	GPIO10
12	GPIO11
13	GPIO12
14	AnalogIn -
15	AnalogIn +

Relay /Aux.

PIN	Function
1	 R 1
2	
3	 R 2
4	
6	 R 3
5	
9	
8	 R 4
7	
10	
11	AUX 1
12	A-GND
13	AUX 2
14	A-GND
15	D-GND

NOTE

Note: The analog inputs of the BNC and the GPIO connectors are internally connected. No extra power cable is required.

Status Indicator

The instrument status indicator indicates one of four possible instrument conditions:

- When the status indicator is *OFF* (and power switch light is on), the instrument is in a *prerun* condition, and is ready to begin an analysis.
- A *green* status indicator indicates the instrument is performing an analysis (*run* mode).
- A *yellow* status indicator indicates a *not-ready* condition. The instrument is in a not-ready state when it is waiting for a specific condition to be reached or completed (for example, front door not closed), or while a self-test procedure is running.
- An *error* condition is indicated when the status indicator is *red*. An error condition indicates the instrument has detected an internal problem which affects correct operation of the instrument. Usually, an error condition requires attention (for example, leak, defective internal components). An error condition always interrupts the analysis.

Replacing the UIB Firmware

The installation of new firmware is required:

- If the new version solves problems of currently installed version.

To upgrade the UIB firmware follow the procedures and instructions given on the Internet at:

<http://www.agilent.com/chem>

To download and install always the newest available version of the firmware on your system call your local service provider for assistance.

Figure 1

Connectors of the G1390A Universal Interface Box (UIB)

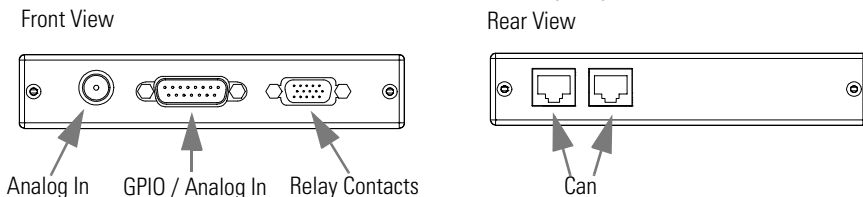


Table 2**Technical and Performance Specifications**

Dimensions	100mm*140mm*30mm
Absolute maximum ratings:	
Power	Input voltage 22V to 25V DC Input current < 100mA
Signal Specifications:	
CAN	2-wire serial bus system
Analog-In.	-1V to 1V Resolution = not specified Peak width = not specified
GPIO	TTL compatible Input and Output Open collector characteristic Input voltage range 0V to 5V
Relay Outputs	2 contact closure outputs and 2 double throw outputs $I_{\max} = 250 \text{ mA}$ $U_{\max} = 30 \text{ V DC/AC}$ The contacts are protected by a self-resetting PTC-fuse

Cables:

- CAN cable:

50 cm	PN 5181-1516,
100 cm	PN 5181-1519
- Relay Outputs:

PN G1103-61611

- GPIO

General Purpose cable:	PN 18594-60520
Interface cable for the	
1100 Series LC-MSD (G1946 C/D):	PN G1968-60002
- Analog Cables

*BNC to BNC:	PN 8120-1840
*BNC to spade lugs (general purpose):	PN 01046-60105

Table 3**Relay Outputs (G1103-61611) Cable Descriptions:**

Connector PIN	Signal Name	Wire Color
1	Relay 1 contact, common	White
2	Relay 1 contact, NO	Brown
3	Relay 2 contact, common	Green
4	Relay 2 contact, NO	Yellow
5	Relay 3 contact, common	Gray
6	Relay 3 contact, NO	Pink
7	Relay 4 contact, common	Blue
8	Relay 4 contact, NO	Red
9	Relay 3 contact, NC	Black
10	Relay 4 contact, NC	Violet
11	AUX1	Gray/Pink
12	A-GND	Red/Blue
13	AUX2	White/Green
14	A-GND	Brown/Green
15	D-GND	White/Yellow

Table 4**GPIO General Purpose Cable (18594-60520) Descriptions:**

Connector PIN	Signal Name	Wire Color
1	GPIO 1	Green
2	GPIO 2	Violet
3	GPIO 3	Blue
4	GPIO 4	Yellow
5	GPIO 5	Black
6	GPIO 6	Orange
7	GPIO 7	Red
8	GPIO 8	Brown
9	Digital Ground	Gray
10	GPIO 9	NC
11	GPIO 10	NC
12	GPIO 11	NC
13	GPIO 12	NC
14	AnalogIn -	NC
15	AnalogIN +	White

NOTE

For more Information about any other cables, please refer to the Cables section in any of the 1100 Series Reference Manuals

