Agilent

Diode Array Detector

The following table lists all the Derived Model Numbers associated with this application and a brief description of the differences (changes).

Equipment Name	Diode Array Detector
Master Model	G7117B
Derived Model	G7117A, G7117C

Description of the difference

The listed products are electrically identical with only differences maximum signal data rate and slit width settable width or fixed size.
Below a table with details of differences per model:

Master Model	**Description**
G7117B	Agilent 1290 Infinity II Diode Array Detector (DAD) for liquid chromatography systems offers multiple wavelength and full spectral detection at sampling rates up to 240 Hz. Programmable slit from 1 to 8 nm provides optimum incident light conditions for rapid optimization of sensitivity, linearity and spectral resolution.
Derived Model	Description
G7117A	Agilent 1290 Infinity II Diode Array Detector FS (fixed slit) for liquid chromatography systems offers multiple wavelength and full spectral detection at sampling rates up to 120 Hz. Fixed slit = 4nm
G7117C	Agilent 1260 Infinity II Diode Array Detector HS (high sensitivity) for liquid chromatography systems offers multiple wavelength and full spectral detection at sampling rates up to 120 Hz. Without illumination of front. Fixed slit = 4nm

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a) Description of the difference

Description	Master model: G7117B	Derived model: G7117A	Derived model: G7117C
Programmable slit	YES	n/a	n/a
Fixed slit	n/a	YES	YES
Maximum data rate (Note 1)	160 Hz	120 Hz	120 Hz
Antenna	2 Lamp, Detection Cell,	Use same main and addon board as G7117B	Use same main and addon board as G7117B
Radio Unit	Main Board: 2 RFID Readers	Use same main and addon board as G7117B	Use same main and addon board as G7117B
Electronics (Note 1)	HITAG reader chip conducted output power 26.81dBm @ 125kHz	Use same main and addon board as G7117B	Use same main and addon board as G7117B
Reporting	G7117B	G7117A	G7117C

All the models have common circuits, components and mechanical hardware. The differences are in the different optical slits in the light path (optical system) only.
Note 1: Derived models which are identical to the master model referred to in this declaration with regard to EMC and radio frequency emissions.

The optical system of the detector is shown in Figure 1

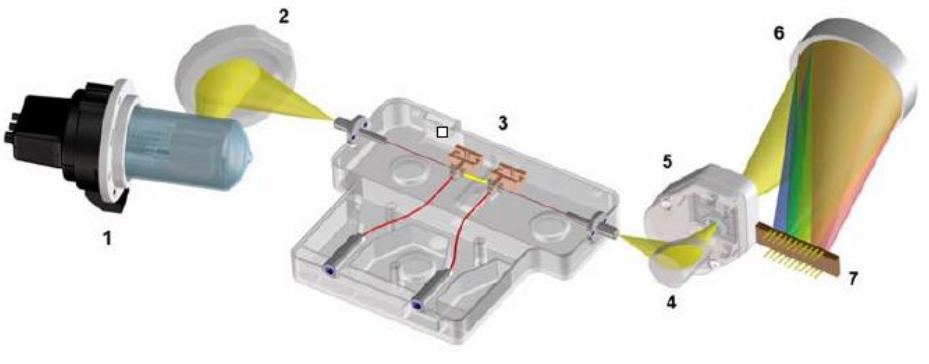

Figure 1 Optical System of the Detector

1	UV-lamp
2	Lamp mirror
3	Flow cell
4	Fold mirror
5	Programmable (G7117B) or Fixed (G7117A) slit
6	Grating
7	Array

Note 1: Data Rate:

Detector is microprocessor controlled. Microprocessor reads the information of the diode array (7) with a continuous sampling rate. Microprocessor calculates an average value based on a programmable filter characteristic resulting in a data rate of:

- G7117B: 0.31Hz, 0.62Hz, 1.25Hz, 2.5Hz, 5Hz, 10Hz, 20Hz, 40Hz, 80Hz, 160Hz, 240Hz
- G7117A: 0.31Hz, 0.62Hz, 1.25Hz, 2.5Hz, 5Hz, 10Hz, 20Hz, 40Hz, 80Hz, 120Hz
- G7117C: 0.31Hz, 0.62Hz, 1.25Hz, 2.5Hz, 5Hz, 10Hz, 20Hz, 40Hz, 80Hz, 120Hz

  Data Rate is limited by firmware, no difference in hardware, therefore EMC characteristic of the instrument not affected.
- These data can be read by LAN interface.

2) Fixed Slit / Programmable Slit

Both slits are driven by the same Stepper Motor (12V dc) and connected to the same electronic board. The cable of the fixed slit is solder directly to the stepper motor. The cable of the variable slit is attached via a connector. The cables differ in color only. Therefor the different slits are not related to the EMC characteristic.