

Agilent 1200 Infinity Series
High Dynamic Range Diode Array Detector Solution

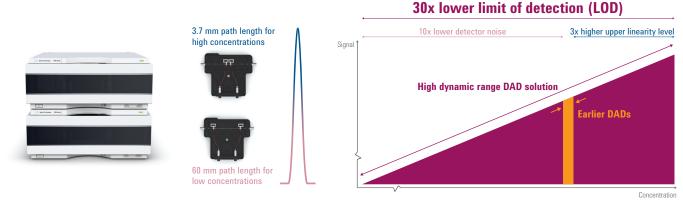
## Extend your insight with a 30x wider linear UV-range





### EXTEND YOUR INSIGHT WITH A 30X WIDER LINEAR UV-RANGE

Expand your UV-detection capabilities with the 30x wider linear UV-range offered by the new high dynamic range detection solution from Agilent. By combining the signals from two diode array detectors with different path length Max-Light flow cells, Agilent's 1200 Infinity Series High Dynamic Range DAD solution allows you to detect and quantify all components in your sample in a single run — making it ideal for analysis of mixtures with widely different concentration levels.



Two 1260 or 1290 Infinity diode array detectors are deployed — one is fitted with a 3.7 mm path length flow cell, the other has a longer 60 mm path length flow cell. The signal from the longer path length cell is taken to quantify the low concentrations and the signal from the shorter path length cell for the high concentrations. Specially developed algorithms correct for the different retention times and compute these signals to expand the linear dynamic range by a factor of 30 compared to earlier generation Agilent diode array detectors.

#### Reduce turnaround times and boost productivity

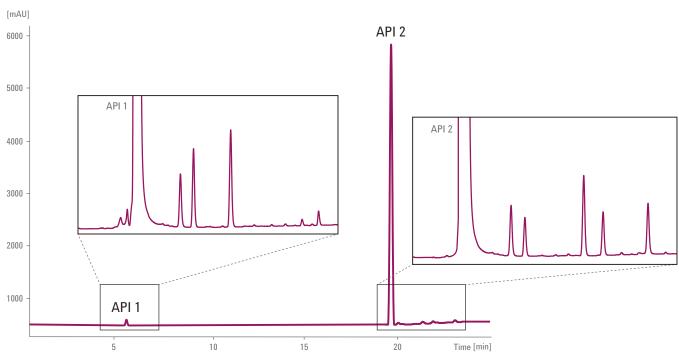
Compared to earlier generation
Agilent diode array detectors, the new
high dynamic range detection solution
gives you a linear UV-range more than
30 times wider than before. Now, you
can rest assured that the detector
response from your sample will fit
within your calibration range. That
means you save time by eliminating
the need for reanalysis, recalibration
or additional sample preparation
steps such as sample dilution.

#### Gain up to 30-times higher sensitivity

The Agilent high dynamic range detection solution extends the upper linearity level to typically 6 absorbance units — allowing you to inject 3 times more sample and at the same time benefit from 10 times lower detector noise. This gives you up to 30 times higher sensitivity for simultaneous analysis and quantification of main compounds and impurities. You gain more confidence in automated peak integration and achieve higher area precision for trace level components.

#### Quantify ALL main components and ALL impurities in a single run!

The Agilent high dynamic range detection solution is the ideal tool for impurity analysis of samples with highly different concentrations of active components such as fixed-dose combinations in pharmaceutical drugs or other formulations in the chemical industry. In a single assay you can quantify the active ingredients as well as impurities, reducing significantly the sample turnaround time of your laboratory.



The concentrations of API 1 and API 2 are widely different and previously two runs with different injection volumes would be necessary to quantify both main components and their respective impurities. With the Agilent high dynamic range detection solution you can quantify ALL main components and ALL impurities is just ONE run, reducing the sample turnaround time and thereby boosting your laboratories' productivity.

Expanding the linear dynamic range is achieved by utilizing the technology in Agilent's Max-Light flow cells. Optofluidic waveguides in these flow cells facilitate total

internal reflection for superior light transmission. This gives you extremely low detector noise regardless of the optical path length.



# Boost the performance of your current 1200 Infinity Series LC Simply add a single 1260 or 1290 Infinity DAD for a 30x wider linear UV-range!

Learn more

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© Agilent Technologies, Inc. 2012 Published in the USA, March 1, 2012 5990-9595EN

