

CFX & CFX-UV COLORIMETERS

FOR USE WITH CONTINUOUS FLOW ANALYSERS



Introduction

The CFX & CFX-UV colorimeters are designed for use with continuous flow and flow injection analysers. A key benefit of the CFX & CFX-UV colorimeters is the simple design providing easy access to flowcells, filters and lamp.

The single lamp design and direct light path (no fiberoptic light conductors) provides a highly efficient system with minimal heat generation and lower maintenance requirements.

The unit is expandable from 1 to 4 channels of detection while the footprint remains one of the smallest of any continuous flow laboratory colorimeter. The colorimeter also offers the option for sample blanking capability through specially modified interchangeable flowcell blocks.

Description of Equipment

The colorimeter is fitted with flow-through cells with path lengths of 10-50mm. Light from a quartz-halogen lamp (deuterium CFX-UV) is passed through a narrow band interference filter to select the appropriate wavelength. The light beam then passes through each flow cell to a pair of detectors. A reference beam falls upon the second detector to compensate for any variation in output from the lamp. A light metering screw shutter allows the reference beam to be attenuated to balance the output from the two detectors to give a zero voltage analogue baseline signal for a recorder or data handling system.

For noisy signals, or irregular baseline effects, a damping circuit provides a smoothed output. Signal damping is activated on a per channel basis by a switch conveniently situated within the flow cell compartment.

The read/zero switch located on the front panel allows the recorder zero position to be verified. In the zero position the output is zero volts so that the position of the recorder pen may be adjusted by the recorder zero control. In the read position the normal analogue signal is output to the recorder.

The sensitivity of the colorimeter may be varied by a setting control that amplifies the output signal. The control is operated by a ten-turn vernier potentiometer situated on the front panel. The analogue out level is controlled by this potentiometer, the higher, the vernier setting, the greater is the expansion of the signal. This allows the adjustment of the analogue out to attain full peak height on any given channel.

The unit has a mains on/off rocker switch situated on the back panel with a neon light on the front panel to confirm that the instrument is switched on. The CFX-UV also has two additional lamps to indicate the status of the deuterium lamp.

Specification

Model Type	CFX & CFX-UV
Light Source	Quartz-halogen Deuterium (CFX-UV)
Flow Cell Holder	12mm square 10mm path length flow cell 12 x 50mm rectangular 50mm path length flow cell 15mm path length 50mm path length
Flow Cells	12 x 12mm square 10mm path length with visible or quartz windows with or without debubblers 50 x 12mm square 50mm path length with visible or quartz windows 15mm path length visible flow cell with or without debubblers 50mm path length visible flow cell with or without debubblers
Output	200mv analogue linear signal compatible with recorder and data acquisition systems
Mains Voltage	110/220 volts 50/60Hz
Dimensions	235cm (L) x 155cm (H) x 120cm (W)
Weight	4kg

Ordering Information

Product Code	Description
BS00227	1 Channel Colorimeter, CFX-1
BS01855	2 Channel Colorimeter, CFX-2
BS01856	3 Channel Colorimeter, CFX-3
BS01857	4 Channel Colorimeter, CFX-4
BS00229	1 Channel UV Colorimeter, CFX-UV

For details on flow injection systems, continuous flow analysers, data handling systems and specialised process control equipment please contact Burkard Scientific. Burkard Scientific reserves the right to change specification without notice

