# **Four Channel Digital Interface**

SPECIFICATIONS	
Fundamental Drive Waveform	2 kHz ac square wave
Modulation Amplitude	0-10 V rms
Modulation Resolution	1 mV (0.155 mV using LabVIEW™ subroutines)
DC Offset	< 5 mV
Communications Interface:	USB or RS232
LC Cell to Controller Connections	SMA-SMB, 2 m cable length
Power Requirements	100 – 240 V ac 47 – 63 Hz 500 mA
CE Compliance	compliant
Dimensions (L x W x H)	9.50 x 6.25 x 1.50 in.
Weight	2 lbs.

ADVANCED PACKAGE ONLY	
Modulation Waveforms	external modulation input (0-5 V) sinusoidal triangle square sawtooth transient nematic effect
Temperature Control (one channel only)	Active heating/passive cooling to within ± 1° C of nominal set point
Sync Output	TTL, 1 μs pulse, user specified phase

## **Minimum System Requirements**

- PC with Pentium II class processor
- 32 MB RAM
- CD ROM drive
- 20 MB hard drive space
- USB or RS232 COM Port
- Windows™ 98/ME/2000/XP/Vista
- Use of LabVIEW Instrument Library requires LabVIEW version 6.1 or higher

ORDERING INFORMATION	
Basic	D3040
Advanced	D3050
SMA to SMB Cables	SMA-SMB

Two year and three year extended warranty options available, please contact your Meadowlark Optics sales engineer

## **Basic package includes:**

- D3040 Controller Unit
- User Manual
- USB and RS232 cables
- Power supply and power cable
- CellDRIVE 3000 Basic Software
- National Instruments LabVIEW™ virtual instruments driver

### Advanced package includes:

- D3050 Controller Unit with external input and sync output front panel connectors
- User Manual
- USB and RS232 cables
- Temperature control cable
- LC-Controller interface cable
- Power supply and power cable
- Temperature monitoring and control
- CellDRIVE 3100 Advanced Software
- National Instruments LabVIEW virtual instruments driver

#### **NOTES:**

- D3040 Controllers may be upgraded to D3050 specifications. This upgrade also includes CellDRIVE 3100. Please contact a Sales Engineer for more information.
- 2. Previous generations of Meadowlark LC devices with TSC option may not be compatible with the TSC option in the D3050.
- 3. Previous generations of Meadowlark LC Controllers used BNC to SMB cables. Adapters and replacement cables are available. Please contact a Sales Engineer for assistance.
- 4. Temperature monitoring and control is only available on the D3050 and requires a liquid crystal device with the temperature sensing and control (TSC) option.