

## XC-700 SERIES XPERIENCE CONTROLLER

### XC range

The Nexmosphere XC range offers Xperience Controllers in a compact form factor while offering various onboard functionalities. Choose the right controller series based on the functionality needed, whether this is controlling multiple RGBW LED strips, pixel LED strips or (optical) audio switching. Combine this with Elements connected onto the X-talk channels to build your own unique experience.



### XC-700 series

The 700 series are equipped with LightMark interfaces which allow connecting flexible pixel LED strips. LightMark allows for creating wave-like LED animations and virtually dividing a Pixel LED strip into multiple segments and controlling each of those segments separately.

### Features

- X-talk interface for easy sensor connection
- LightMark interface for Pixel LED strips
- Dimmable RGBW LED output

	XC-720	XC-741	XC-748	XC-760
<b>X-Talk interfaces</b>	4	8	4	4
<b>LightMark interfaces</b>	2	4	4	6
<b>RGBW LED outputs</b>	-	-	2	-

### X-talk interface

Connect a wide range of sensors, buttons, LEDs, or any other of the Nexmosphere Elements to create your unique shopper experience. Due to auto-configuration, no additional setup is required for seamless operation.

- Plug and smile interface
- Compatible with any of the Nexmosphere Elements
- Providing power to the connected Elements for easy system wiring

### LightMark

The LightMark protocol provides numerous functionalities for animated LED control.

- Preprogrammed patterns with adjustable parameters. These patterns can be modified by changing the parameters to fit the exact application.
- Pattern, speed, color, and brightness control
- Individual segment control
- JST connectors for easy "click-in"

### USB interface

The industry-standard USB interface allows 3rd party product interfacing. The Xperience controller manifests itself as a USB-to-Serial converter and is compatible with all mainstream operating systems and Digital Signage players.

- Reliable high-speed USB serial communication
- Easy interfacing with 3rd party products
- No special drivers needed\*

*\* occasionally Windows devices need a VCP driver*

### X-Script API

The X-Script API runs on the controller by default. All connected Elements and system behavior can be controlled with our standardized API commands.

### Benefits

- Auto start-up and configuration for highly reliable applications (24/7 operability)
- Compact form factor for easy installation in or behind displays
- Control multiple Pixel LED strips from one single controller
- Compatible with all Nexmosphere Elements

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## Thermal specifications

Operating temperature: +10°C...+40°C/ +50°F ... +104°F  
 Storage temperature: -20°C...+50°C/ -4°F ... +122°F  
 Cooling: Passive cooling (no moving parts)

## Electrical specifications

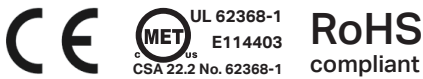
Operating voltage: 12-24VDC  
LPS power adapter  
 Max. system current: 4.0A  
 Power consumption: 0.2A

Max. output per LightMark interface: 2.0A @5V (= ±1.0A @12V = ±0.5A @24V)  
 Max. output per X-talk interface: 500mA @5V (= ±0.3A @12V = ±0.2A @24V)  
 Max. output per RGBW output: 3.0A @ 12-24VDC

## Serial communication specifications

Baudrate: 115200  
 Data bits: 8  
 Parity: None  
 Stop bits: 1  
 Flow control: None  
 Protocol: ASCII  
 EOL: CR+LF

## Standards and Certifications



## Miscellaneous

- Robust compact housing with screw brackets for secure fixing
- Built-in magnets for easy mounting on metal surfaces
- Both horizontal and vertical mounting allowed
- Diagnostic LED indicating potential issues
- Status LED indicating power & input/output operations
- 1-year warranty (optional 3-year extended warranty available)

## Packaging

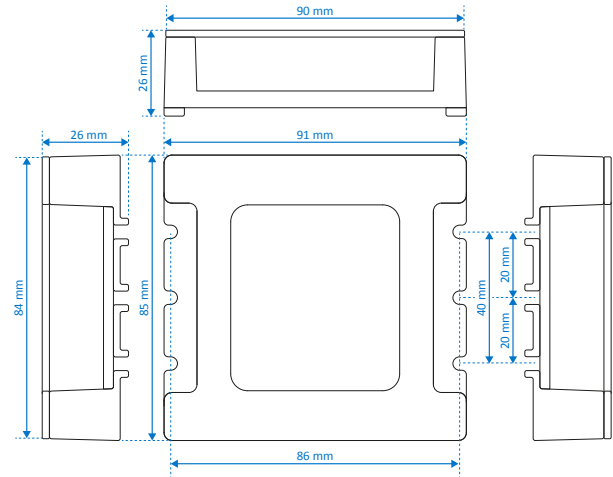
Netto weight: 120g  
 Items per carton 1 or 10 pcs

## Ordering information

Product ID	Description	Quantity
XC-720	Xperience controller, 2x LightMark interface, 4x X-talk, USB	1 pc
XC-741	Xperience controller, 4x LightMark interface, 8x X-talk, USB	1 pc
XC-748	Xperience controller, 4x LightMark interface, 2x RGBW LED output, 4x X-talk, USB	1 pc
XC-760	Xperience controller, 6x LightMark interface, 4x X-talk, USB	1 pc

## Mechanical dimensions

LxWxH: 91 x 86 x 26 mm  
 Screw fixation: 20 / 40 x 85 mm



## Hardware interfaces

	XC-720	XC-741	XC-748	XC-760
1.	12-24VDC Power input, 2.1mm DC socket			
2.	API interface, Micro-USB			
3-6	X-talk interface, address 001-004			
7-10	LightMark interface, address 111-114			
11.	LightMark addr. 005	X-talk address 005	RGBW ch. 001	LightMark addr. 005
12.	-	X-talk address 006	-	-
13.	-	X-talk address 007	-	-
14.	LightMark addr. 006	X-talk address 008	RGBW ch. 002	LightMark addr. 006

