



VDO Fatron 20

Your creative VDO toolbox just got bigger, more dynamic and way more flexible, making your P3 System Controller even more versatile.

VDO Fatron 20 is a 20 mm pixel pitch outdoor-rated LED video batten with an extensive range of optical accessories for a wide variety of looks that allows you to seriously play with creativity in 3D stage designs. Easy video-mapping and creative mix 'n' match with other Martin LED video products via the P3 System Controller. It uses the same integrated power and data cabling as VDO Sceptron and VDO Dotron, making installation a breeze. Be creative.

The perfect expansion of your creative VDO toolbox for exciting 3D stage setups

Extensive range of field-exchangeable diffusers and lenses for a great variety of looks

Easy setup, mapping and configuration via P3 System Controller

GALLERY



FEATURES

- Supported by integrated power and data processor (P3 PowerPort 1500 or P3 PowerPort 1000 IP) and simple cabling system
- Combined power and data cabling (compatible with other products such as VDO Sceptron and VDO Dotron)
- P3/DMX/RDM controllable (automatic protocol detection)
- Extensive range of built-in effects
- Intuitive mapping and addressing via P3 System Controller
- Fully brightness and color calibrated for optimal consistency between products (colors matched with VDO Sceptron and VDO Dotron)
- Pixel-level brightness and color calibrated for a completely homogenous look
- High-quality 16-bit per color image processing technology
- 20 mm pixel pitch
- 500 cd per meter calibrated
- 1500 lumen per meter calibrated
- 8 different diffuser options plus 1 lens option (all field-exchangeable)
- IP65 rated for outdoor use
- Versatile rigging accessories
- Available in two lengths: 1000 mm and 320 mm

TECHNICAL SPECIFICATIONS

Physical

VDO Fatron™ 20, 320 mm model

Length: 320 mm (12.6 in.)

Width: 80 mm (3.15 in.)

Height without front: 28 mm (1.10 in.)

Height with standard front (Square Diffuser): 48 mm (1.89 in.)

Weight without front: 0.85 kg (1.9 lbs.)

Weight with standard front (Square Diffuser): 0.95 kg (2.1 lbs.)

VDO Fatron™ 20, 1000 mm model

Length: 1000 mm (39.4 in.)

Width: 80 mm (3.15 in.)

Height without front: 28 mm (1.10 in.)
Height with standard front (Square Diffuser): 48 mm (1.89 in.)
Weight without front: 2.5 kg (5.6 lbs.)
Weight with standard front (Square Diffuser): 2.8 kg (6.2 lbs.)

Control and Programming

Control options: Martin P3™ System Controller (via Martin P3 PowerPort™) or DMX
Protocol detection: Automatic
Control modes: RGB, basic, segment and pixel-level
Setting and addressing: Martin P3™ System Controller or RDM-compliant controller
Control resolution: 16-bit (P3) or 8-bit (DMX) control of each color
Color and intensity calibration: Pixel-level
DMX compliance: USITT DMX512-A
RDM compliance: ANSI/ESTA E1.20
Firmware update: Via Martin P3™ System Controller

DMX channels

VDO Fatron™ 20, 320 mm: 3/10/19/55
VDO Fatron™ 20, 1000 mm: 3/10/37/157

Control/User Interface

Device status: Multi-color visual indication
Device test and reset: Magnetic pushbutton to call up local test patterns and reset device

Optics

Minimum LED lifetime: 50 000 hours (to >70% luminous output) *

**Figure obtained under manufacturer's test conditions.*

Options

Open Front
Flat Diffuser
Smoked Flat Diffuser
Round Diffuser
Smoked Round Diffuser
Square Diffuser (supplied with fixtures as standard)
Smoked Square Diffuser
NoBlend Diffuser
Smoked NoBlend Diffuser
Lens Array Narrow

All optical accessory options are interchangeable and clip onto fixtures

Photometric Data

Color resolution: 16 bits per color (48 bits per pixel)
Viewing angle: 120° x 120°

VDO Fatron™ 20 320 mm

LED array: 4 x 16
Pitch (pixel center-to-center): 20.00 mm
Luminous intensity, calibrated mode: 500 cd per meter
Total output, calibrated mode: 1500 lumens per meter
Total output, calibrated mode: 6250 nits

VDO Fatron™ 20 1000 mm

LED arrays: 4 x 50
Pitch (pixel center-to-center): 20.00 mm
Luminous intensity, calibrated mode: 500 cd per meter
Total output, calibrated mode: 1500 lumens per meter
Total output, calibrated mode: 6250 nits

Video Processing

Brightness control
Gamma correction and control
Color temperature control
Color space control
Calibration processing
Synchronization

Signal Protocol

Martin P3 (via Martin P3™ PowerPort) or DMX (direct)

Construction

Base: Extruded aluminum profile
Color: Matt black
Protection rating: IP65
RoHS compliant

Installation

Orientation: Any
Mounting: Channel for M6 captive nuts on back of profile
Mounting options: M6 bolts, optional sliding bracket (accepts M12 bolt)

Connections

Power and data input: 6-pin custom (BBD) IP66-rated
Power and data thru: 6-pin custom (BBD) IP66-rated
Hot plugging compatible

Electrical

Nominal input voltage: 48 VDC +/- 4%
Maximum power consumption, all LEDs at full intensity, VDO Fatron™ 20, 320 mm: 20 W
Maximum power consumption, all LEDs at full intensity, VDO Fatron™ 20, 1000 mm: 60 W
Power supply options: Martin P3™ PowerPort 1500, Martin P3™ PowerPort 1000 IP, Martin™ IP66 PSU 240W or generic 48 VDC PSU

Thermal

Cooling: Convection

Maximum ambient temperature (Ta max.): for typical video content: 45° C (113° F)
Minimum ambient temperature (Ta min.): -20° C (-4° F)

VDO Fatron™ 20, 320 mm
Max. total heat dissipation, calculated, +/- 10%: 70 BTU/hr

VDO Fatron™ 20, 1000 mm
Max. total heat dissipation, calculated, +/- 10%: 205 BTU/hr

Approvals

EU safety: EN 60950-1, EN 60950-22, EN 62471
EU EMC: EN 55024, EN 55032
US safety: UL 60950-1, UL 60950-22
US EMC: CFR Title 47 Part 15 Class A
Canadian safety: CSA C22.2 No. 60950-1, No. 60950-22
Canadian EMC: ICES-003 Class A
Australia/NZ: RCM

Accessories

Test Tools with magnetic swipers, set of 10: P/N 91610139

Hardware

VDO Sceptron™/Fatron™ Sliding Brackets, set of 10: P/N 91610123
Low Profile VDO Sceptron™/Fatron™ Half Coupler: P/N 91611790
VDO Sceptron™/Fatron™ Linear Coupler: P/N 91611843
VDO Sceptron™/Fatron™ Spigot Adapter, 28 mm (1.1 in.): P/N 91611791
VDO Sceptron™/Fatron™ Floorstands, set of two: P/N 91611792
Super Lightweight Half Coupler Rigging Clamp, black: P/N 91602018
VDO Fatron™ Curving Coupler: P/N 91610164

Optical

320 mm modules

VDO Fatron™ Flat Diffuser, 320 mm: P/N 91611809
VDO Fatron™ Flat Smoked Diffuser, 320 mm: P/N 91611811
VDO Fatron™ Round Diffuser, 320 mm: P/N 91611813
VDO Fatron™ Round Smoked Diffuser, 320 mm: P/N 91611815
VDO Fatron™ Square Diffuser, 320 mm: P/N 91611817
VDO Fatron™ Square Smoked Diffuser, 320 mm: P/N 91611819
VDO Fatron 20™ NoBlend Diffuser, 320 mm: P/N 91611825
VDO Fatron 20™ NoBlend Smoked Diffuser, 320 mm: P/N 91611827
VDO Fatron 20™ Lens Array Narrow, 320 mm: P/N 91611831

1000 mm modules

VDO Fatron™ Flat Diffuser, 1000 mm: P/N 91611810
VDO Fatron™ Flat Smoked Diffuser, 1000 mm: P/N 91611812
VDO Fatron™ Round Diffuser, 1000 mm: P/N 91611814
VDO Fatron™ Round Smoked Diffuser, 1000 mm: P/N 91611816
VDO Fatron™ Square Diffuser, 1000 mm: P/N 91611818
VDO Fatron™ Square Smoked Diffuser, 1000 mm: P/N 91611820
VDO Fatron 20™ NoBlend Diffuser, 1000 mm: P/N 91611826
VDO Fatron 20™ NoBlend Smoked Diffuser, 1000 mm: P/N 91611828
VDO Fatron 20™ Lens Array Narrow, 1000 mm: P/N 91611832

Combined DC power and data cables

Power + Data Input Cable, 4-pin male XLR (for P3 PowerPort) to female BBD, 0.25 m (9.8 in.): P/N 91616046
Power + Data Input Cable, 5-pin male XLR (for DMX) + wire tails (for PSU) to female BBD, 0.25 m (9.8 in.): P/N 91616048
Power + Data Input Cable, 5-pin male XLR (for DMX) + 4-pin male XLR (for P3 PowerPort) to female BBD, 0.25m (9.8 in.): P/N 91616049
Power + Data Input Cable, 5-pin male XLR (for DMX) + male Tripix type (for Martin IP66 PSU 240W) to female BBD, 0.25m (9.8 in.): P/N 91616050
Power + Data Output Cable, male BBD to 4-pin female XLR, 0.25m (9.8 in.): P/N 91616047
DMX Lead-out Cable, male BBD to 5-pin female XLR, 0.25 m (9.8 in.): P/N 91616051

BBD extension cables

Power + Data Extension Cable, Rental Type, BBD to BBD 1 m (3.3 ft.): P/N 91616041
Power + Data Extension Cable, Rental Type, BBD to BBD, 2.5 m (8.2 ft.): P/N 91616024
Power + Data Extension Cable, Rental Type, BBD to BBD, 5 m (16.4 ft.): P/N 91616042
Power + Data Extension Cable, Rental Type, BBD to BBD, 10 m (32.8 ft.): P/N 91616043
Power + Data Extension Cable, Rental Type, BBD to BBD, 25 m (82.1 ft.): P/N 91616044
Power + Data Cable, Rental Type, 100 m (328 ft.) bulk without connectors: P/N 91616045

Connectors

Power + Data Cable Connector, BBD, Male: P/N 91611750
Power + Data Cable Connector, BBD, Female: P/N 91611751
Blanking Caps for unused female BBD connectors, set of 10: P/N 91616052

Related Items

Martin P3™ PowerPort 1500: P/N 90721040
Martin P3™ PowerPort 1000 IP Rental: P/N 90721070
Martin™ IP66 PSU 240W external power supply unit (was Tripix Power IP66): P/N 90760330
Martin P3-050™ System Controller: P/N 90721090
Martin P3-100™ System Controller: P/N 90721010
Martin P3-150™ System Controller: P/N 90721015
Martin P3-200™ System Controller: P/N 90721020
Martin P3-300™ System Controller: P/N 90721060
Martin P3-PC™ System Controller: P/N 90721030

Ordering Information

Flightcase for 15 x VDO Fatron™ 320 mm / 5 x VDO Fatron™ 1000 mm: P/N 91515045

Flightcase Extender for 15 x VDO Fatron™ 320 mm / 5 x VDO Fatron™ 1000 mm: P/N 91515046

VDO Fatron™ 20

VDO Fatron 20™, 320 mm, in cardboard box: P/N 90357691

VDO Fatron 20™, 1000 mm, in cardboard box: P/N 90357692

