PHILIPS

Fortimo

LED system

FastFlex Gen4

LED

Outstanding performance
optical differentiation

Flexible LED system approach

Outdoor and Industry LED lighting

Fortimo FastFlex Gen4

comprises three groups: Standard, Differentiation Array (DA) and Differentiation Protected (DP).

Standard Fortimo FastFlex Gen4, the 'one-stop-shop' solution

The standard Fortimo FastFlex Gen4 is a LED lighting system containing two key building blocks: a LED board and a FastFlex lens. There are two board forms factors (2x8 and 2x4) and eight standard lenses to comply with the most common road and industrial applications. It is suitable for operation with Xitanium LED outdoor drivers.

Fortimo FastFlex DA Gen4 for exceptional optical differentiation

The Fortimo FastFlex Gen4 Differentiation Array (DA) versions are system propositions (LED module driver) that enable exceptional optical differentiation through the use of third party 2x2 array lenses, including high temperature 2x2 lenses. There are four board form factors (2x8, 2x6, 2x4 and 2x2).

They are suitable for operation with Xitanium LED outdoor drivers and are compatible with Zhaga book 15.

New Fortimo FastFlex DP Gen4 for IP rating at module level

The Fortimo FastFlex Gen4 Differentiation Protected (DP) versions are also system propositions (LED module + driver) that enable excellent optical differentiation through the use of third party lenses. Available with a board form factors of 2x6, they enable IP rating at module level when installed with IP (2x6) ready lenses.

All three groups feature a new Tc point for easy access, patented surge protection, a wide range of color temperatures (CCT) and color rendition index (CRI) options.

> " **The fixture design flexibility** and optical differentiation you need for road, urban and industrial lighting applications. "

What's new?

- Tc measurement point with easy access and patented module surge protection
- Differentiation Protected (DP) product line for IP rating at module level when installed with IP ready lenses
- Differentiation array product line compatible with high temperature third party lenses
- X product line (standard X, DAX and DPX products) featuring outstanding efficacy performance for road and street lighting applications
- Updated lifetime and lumen depreciation module information up to 120Kh

Performance and
versatility

Ultimate performance and design flexibility

- Current range from 100 to 1500 mA for flux flexibility
- State-of-the-art LED efficacy up to 176 lumen per watt
- Excellent quality of light with CRI 70 and 80 in a range of color temperatures
- Patented module surge protection up to 6 kilovolts
- New case temperature (Tc) measurement point on front of the board for easy access
- Wide lumen output range to match every application need
- Complete system proposition with a wide range of driver choices

Benefits for every OEM and product range

- Short time to market and minimum assembly time via 9 standard FastFlex modules and 8 standard lenses
- Optical differentiation and short assembly time (FastFlex DA & DAX plus third party 2x2 50 mm lenses)
- Optical differentiation and IP rating (FastFlex DP & DPX plus third party 2x6 IP ready lenses)

Applications

- Residential – paths, pedestrianized tourism, and commercial areas
- Mixed traffic – commercial and tourist areas, and city centers
- Motorized traffic – airport express ways, tourist routes
- Highways – national roads, rural roads, freeways, motorways and tunnels
- High bay/low bay – flood and industrial lighting
- High lumen applications – areas and arenas

Full portfolio offer

- Range includes 2700,3000, 4000, 5700 and 6500 K Color temperatures
- Choice of color rendition index (CRI) of 70 and 80
- 7 different module form factors
- System warranty of five years

Introducing Fortimo FastFlex Gen4
Outdoor and industrial lighting are highly diverse fields, and as an OEM, you can differentiate your products through fixture design, speed--to--market, optical (photometric) performance, efficacy, cost, or product life time. To help you in all these areas, we developed the fourth generation of the Fortimo FastFlex portfolio so you can meet every project requirement. FastFlex Gen4 brings you more than state-of-the-art LED modules; it's supported by practical reliability and performance data that makes it easier for you to design and specify fixtures that stand from the crowd.

From a one-stop-shop to unique optical performance
Standard Fortimo FastFlex Gen4 is an ideal 'one-stop-shop' solution with boards and lenses from Philips. It shortens your development cycle, and still provides optical flexibility thanks to eight standard light distributions. When you want unique photometric performance, the FastFlex Gen4 Differentiation Array (DA & DAX) and new FastFlex Differentiation Protected (DP & DPX) enables you to use third-party lenses for an unlimited range of optical configurations. FastFlex Gen4 DP and DPX also maximize cost effectiveness and fixture efficacy via IP protection at LED module level.

Unparalleled lumen per watt
The Fortimo FastFlex LED board Gen4 offers best-in-class energy efficiency, with performance efficacy of up to 176 lumens per watt. The remarkable energy savings and CO_2 reductions achieved with a Fortimo FastFlex LED Gen4 system can be further extended by lowering the light levels during off peak hours (FastFlex support multiple dimming protocols). Energy usage is reduced and light pollution is minimized, improving quality of life for local residents.

Information to optimize temperature and drive current settings
The Fortimo FastFlex LED module Gen4 features a comprehensive set of LED module performance information, allowing you optimize your fixture design to meet target specifications. This performance information includes charts displaying the relationship between case temperature (Tc) and module driving current, expected lifetime (up to 120,000 hours) and lumen depreciation values (L70 and above). These data enable you to align the fixture performance-to-cost ratio according to application needs.

The **Easy Design-in Tool**

Create your ideal configuration in minutes. Design the optimal LED system in the fastest, most simple way.

The Easy Design-in Tool is a powerful, time-saving way to speed up the work of those who design or define LED systems. It's a true solution composer and is ideal for all those involved in delivering added-value LED solutions right through the supply chain.

Check out our tool online!
Visit philips.com/easydesignintool

Fortimo FastFlex Gen4

Product name	MG3 code	GPC	EOC	Units per box
Fortimo FastFlex LED 2x8/730 G4	X1U	9290 015 62506	871869672363000	25
Fortimo FastFlex LED 2x8/740 G4	X1U	9290 015 62606	871869672365400	25
Fortimo FastFlex LED 2x8/757 G4	X1U	9290 015 62706	871869673406300	25
Fortimo FastFlex LED 2x8/830 G4	X1U	9290 015 62806	871869672492700	25
Fortimo FastFlex LED 2x8/840 G4	X1U	9290 015 62906	871869672494100	25
Fortimo FastFlex LED 2x8/730 X G4	X1V	9290 015 72906	871869672486600	25
Fortimo FastFlex LED 2x8/740 X G4	X1V	9290 015 73006	871869672367800	25
Fortimo FastFlex LED 2x4/730 G4	X1X	9290 015 63006	871869672504700	25
Fortimo FastFlex LED 2x4/740 G4	X1X	9290 015 63106	871869672407100	25
Fortimo FastFlex LED 2x8/730 DA G4	X1Y	9290 015 63506	871869672369200	25
Fortimo FastFlex LED 2x8/740 DA G4	X1Y	9290 015 63606	871869672381400	25
Fortimo FastFlex LED 2x8/757 DA G4	X1Y	9290 015 63806	871869673409400	25
Fortimo FastFlex LED 2x8/765 DA G4	X1Y	9290 015 63906	871869672500900	25
Fortimo FastFlex LED 2x8/827 DA G4	X1Y	9290 015 64006	871869674805300	25
Fortimo FastFlex LED 2x8/830 DA G4	X1Y	9290 015 64106	871869672502300	25
Fortimo FastFlex LED 2x8/840 DA G4	X1Y	9290 015 64206	871869672385200	25
Fortimo FastFlex LED 2x8/730 DAX G4	X1Z	9290 015 73106	871869672371500	25
Fortimo FastFlex LED 2x8/740 DAX G4	X1Z	9290 015 73206	871869672383800	25
Fortimo FastFlex LED 2x6/730 DA G4	X20	9290 015 65006	871869672514600	25
Fortimo FastFlex LED 2x6/740 DA G4	X20	9290 015 65106	871869672403300	25
Fortimo FastFlex LED 2x6/840 DA G4	X20	9290 015 65706	871869672520700	25
Fortimo FastFlex LED 2x6/730 DAX G4	X21	9290 015 74006	871869672516000	25
Fortimo FastFlex LED 2x6/740 DAX G4	X21	9290 015 74106	871869672518400	25
Fortimo FastFlex LED 2x4/730 DA G4	X22	9290 015 65806	871869672506100	25
Fortimo FastFlex LED 2x4/740 DA G4	X22	9290 015 65906	871869672405700	25
Fortimo FastFlex LED 2x4/840 DA G4	X22	9290 015 66506	871869672508500	25
Fortimo FastFlex LED 2x2/730 DA G4	X23	9290 015 66606	871869672524500	25
Fortimo FastFlex LED 2x2/740 DA G4	X23	9290 015 66706	871869672526900	25
Fortimo FastFlex LED 2x2/840 DA G4	X23	9290 015 67306	871869672528300	25
Fortimo FastFlex LED 2x6/730 DP G4	X24	9290 015 64306	871869672397500	25
Fortimo FastFlex LED 2x6/740 DP G4	X24	9290 015 64406	871869672399900	25
Fortimo FastFlex LED 2x6/840 DP G4	X24	9290 015 64906	871869672512200	25
Fortimo FastFlex LED 2x6/730 DPX G4	X25	9290 015 73306	871869672510800	25
Fortimo FastFlex LED 2x6/740 DPX G4	X25	9290 015 73406	871869672401900	25

For more information see datasheet

Fortimo and Xitanium – **partners in performance**

Luminaire performance is determined by the sum of its component parts, each carefully designed or selected to meet specific application requirements. In addition to the Fortimo FastFlex Generation 4 modules featured here, we also offer an extensive range of Xitanium LED drivers. Pair components from these complementary families and you'll benefit from design-in simplicity, flexibility, compatibility and exceptionally long life. You'll also enjoy the convenience of dealing with just one knowledgeable supplier of these vital luminaire components.
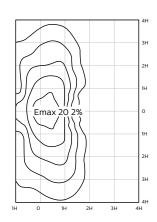
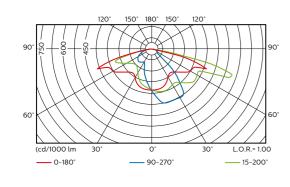# FastFlex Lenses Gen2 applicable for standard Fortimo FastFlex 2x8 and 2x4 Gen4

・Isolux diagram・Polar intensity diagram・Application rendering

Fortimo FastFlex lens 2x8/II-X Gen2

Designed for narrow roads and urban street lighting.

Emax 20 2%

(cd/1000 lm) L.O.R.= 1.00
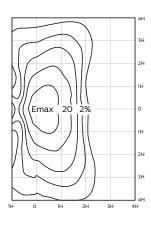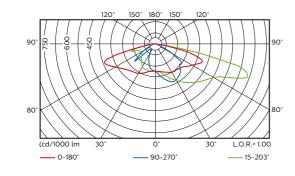— 0-180°   — 90-270°   — 15-200°

Fortimo FastFlex lens 2x8/III-X Gen2

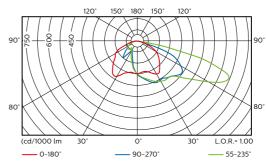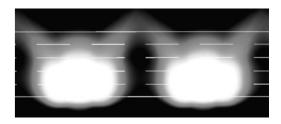Designed for roads of medium width and urban street lighting.

Emax 20 2%

(cd/1000 lm) L.O.R.= 1.00
— 0-180°   — 90-270°   — 15-203°

Fortimo FastFlex lens 2x8/IV-X Gen2

Designed for wide roads and asymmetrical floodlighting.

Emax 50 20 10 5 2%

(cd/1000 lm) L.O.R.= 1.00
— 0-180°   — 90-270°   — 55-235°

Fortimo FastFlex lens 2x8/V Gen2

Designed for symmetrical lighting, e.g. high bays, parking lots, petrol stations.

Emax 50 20 10 2%

(cd/1000 lm) L.O.R.= 1.00
— 0-180°   — 90-270°   — 135-315°

Fortimo FastFlex lens 2x8/HB65 Gen2

Designed for high bay lighting.

Emax 205 2%

(cd/1000 lm) L.O.R.= 1.00
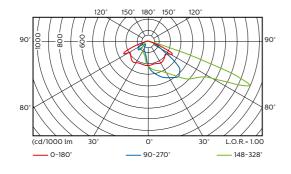— 0-180°   — 90-270°   — 138-318°

Fortimo FastFlex lens 2x8/II–x WTR Gen2

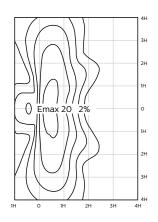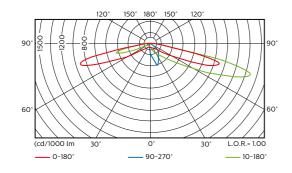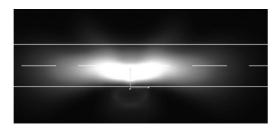Designed for wet road lighting.

Fortimo FastFlex lens 2x4/SW–X Gen2

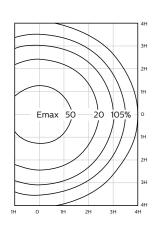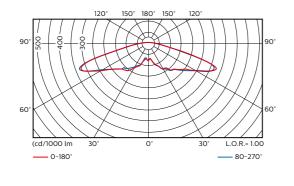Designed for Pedestrian Road and Bicycle path lighting.

Fortimo FastFlex lens 2x4/V_C Gen2

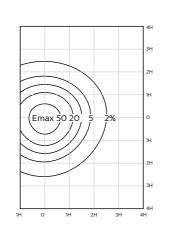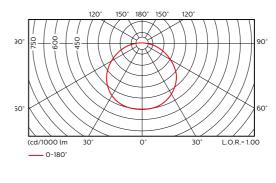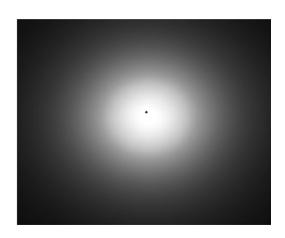Designed for Park lighting and Squares within towns and cities.

Fortimo FastFlex lensless mounting Gen 2

Designed to enable the use of the Fortimo FastFlex Gen3 board without lenses.

Fortimo FastFlex DA and DS Gen3 version operate with third party lenses.
(OEM or complementary partner optics).

Please contact your Phillips sales representative for more information on compatible lenses.

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