LIGHTPOINTE™

FlightStrata™ 155E, 155EW & G

OVERVIEW

The FlightStrata 155E, FlightStrata 155EW and FlightStrata G are the only products on the market to combine auto-tracking with a four-beam system. The full-featured FlightStrata models take LightPointe's proven multiple-beam technology to the next level by ensuring the highest availability and performance of a standalone Optical Wireless solution. FlightStrata receiver lens layout combines Optical Beam Shaping (OBS), with Automatic Power Control (APC), addressing changing atmospherics and building movement. FlightStrata transmits four redundant beams of light that overlap and adjust via Multi-Beam Array Tracking (MBAT) technology. The combination of rotational optics, MBAT and APC results in greater link margins, which translate into improved Optical Wireless performance. FlightStrata is a direct result of customer feedback and our years of field experience around the world.

FEATURES AND BENEFITS

- Gigabit Ethernet Throughput – FlightStrata is available in 155Mbps and a Gigabit Ethernet option, our most robust system that delivers up to 1.25 Gbps of dull-duplex throughput between two buildings.
- Auto Tracking – FlightStrata is the only Optical Wireless product on the market to combine multiple-beam and multiple-receiver architecture with auto tracking.
- Long-Distance Performance – FlightStrata 155E has a typical operational distance range of 3 kilometers.
- Robust Product Housing and Design – with its internal heating element and lens cover defroster, the FlightStrata can perform in temperature ranges of -25°C to 60°C (-13°F to 140°F).
- Immune to Radio Frequency Interference – all LightPointe Optical Wireless products are immune to radio frequency interference and spectrum saturation.

Data Sheet

OUTDOOR UNIT

Description	Four-Beam Optics System with Auto Tracking and Auto Power Control
Receiver/Transmitter(s)	Four receivers, four transmitters
Dimensions (W x H x L)	321 x 297.5 x 620 mm (12.6 x 11.7 x 24.4 in)
Unit Weight	11.1 kg (24.4 lbs)
Shipping Weight	26.4 kg (58 lbs) x 1 linkhead
Operating Voltage	90 to 240 V (50/60 Hz) or +/– 48 V DC
Operating Temperature	-25 C to 60 C (-13 F to 140 F)
Humidity Range	Up to 95% non-condensing
Power Consumption Max	40 W
Immune to EMI & RF Interference	Yes
Built-In Alignment Telescope	Yes
Built-In Defroster	Yes
SNMP Management	Option

FREE SPACE

Bit Rate	FSA155E, FSA155EW = 1.5Mbps to 155Mbps FSA-G = 1.25Gbps

Operational Ranges

	Recommended Distance	Maximum Distance
FSA155E	3,000 m	4,800 m[2]
FSA155EW	1,800 m	2,400 m[2]
FSA-G	750 m	2,000 m[2]

Free-Space Optical Transmitter	VCSEL
Free-Space Wavelength	850 nm
Optical Receiver	Si APD
Receive Power Indicator	10-level bar graph
Status Indicator (LED)	Power, TX Data, LOS, Overload, Data In, Data Out

MULTIMODE FIBER INTERFACE	155E(W)	FSA-G
Protocol	Transparent	Gigabit Ethernet
System Interface	SC Connector	SC Connector
Interface Wavelength	1270 to 1350 nm	780 to 950 nm
Optical Receive Power	-14 to -30 dBm	0 to –17 dBm
Optical Transmit Power	-14 to -22 dBm	-4 to -9.5 dBm

SINGLEMODE FIBER INTERFACE	155E(W)	FSA-G
Protocol	Transparent (FSA622: SONET/SDH/ATM)	Gigabit Ethernet
System Interface	SC Connector	SC Connector
Interface Wavelength	1270 to 1350 nm	1260 to 1360 nm
Optical Receive Power	-8 to -31 dBm	-3 to -20 dBm
Optical Transmit Power	-8 to -15 dBm	-3 to -9.5 dBm

CLASSIFICATION

IEC/EN 69825-1/A2	Class 1M

[2]Operational Range depends on environmental conditions. Maximum distances listed are in ideal, clear weather conditions

LIGHTPOINTE™

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