Kingtone Solutions Co., Ltd. · FIBER OPTIC REPEATER / DAS · DATASHEET

B8+B3+B1 Fiber Optical Repeater Master Unit (MU)

Model: KT-F-L8L3L1-P0-B

A 19-inch master unit that combines LTE B8, B3 and B1 into one fibre distribution system, driving up to two remote units over single-core WDM optics.



KT-F-L8L3L1-P0-B master unit, front view. 19-inch rack-mount chassis with status display and control knob.

Family	**Fiber Optic Repeater / DAS**	Language	**en**	Revision	**R01**
Issued	**2026-11-11**	Status	**RELEASED**	Legacy model	**KT-F-L8L3L1-P0-B**

Key Features

- One master unit integrates B8, B3 and B1, reducing the number of separate coverage chains.
- Standard 19-inch cabinet design with wideband 698-3700 MHz support.
- Drives up to two remote units (RU) over single-core WDM fibre.
- Low power consumption with passive thermal design; local and remote monitoring optional.
- Automatic fault alarm and remote control via RS232, RJ45 or LTE modem.

Technical Specifications

RF Specifications

Values are in-band unless a test condition is given. Uplink and downlink are listed separately.

Parameter	Scope	Test condition	Uplink	Downlink / Value	Unit
Frequency Range	B8	Working in-band	885–915	930–960	MHz
Frequency Range	B3	Working in-band	1710–1785	1805–1880	MHz
Frequency Range	B1	Working in-band	1920–1980	2110–2170	MHz
Bandwidth	B8	Working in-band	30	30	MHz
Bandwidth	B3	Working in-band	75	75	MHz
Bandwidth	B1	Working in-band	60	60	MHz
Output Power	B8	Working in-band	-5±2	–	dBm
Output Power	B3	Working in-band	-5±2	–	dBm
Output Power	B1	Working in-band	-5±2	–	dBm
Number of RU Can be customized	–	–	–	2	–
RF Input Level	–	Working in-band	–	0–+5	dBm
Max Gain	–	Working in-band	0±3	0±3	dB
Max RF Input Without Damage	–	Working in-band	–	10	dBm
VSWR	–	Working in-band	–	≤1.8	–

Optical Specifications

Parameter	Scope	Test condition	Uplink	Downlink / Value	Unit
Optical Output Power	–	–	–	0±2	dBm
Optical Max Input Power	–	–	+4	–	dBm

Parameter	Scope	Test condition	Uplink	Downlink / Value	Unit
Optical Min Input Power	–	–	+0	–	dBm
Optical Input Damage Level	–	–	+10	–	dBm
Optical Wavelength	–	–	–	DL 1310 / UL 1550	nm
Optical Loss Includes the loss of the optical splitter	–	–	–	≤10	dB
Optical Connector WDM, one core	–	–	–	LC/APC × 1	–
Number of Optical Ports	–	–	–	2	–

Power Supply, Mechanical and Environmental

Parameter	Scope	Test condition	Uplink	Downlink / Value	Unit
Input Voltage	–	–	–	100–240	V AC
Input Frequency	–	–	–	50/60	Hz
Dimension (W × D × H)	–	–	–	433 × 358 × 45	mm
Weight	–	–	–	<8	kg
Max Power Consumption	–	–	–	<30	W
Operating Temperature	–	–	–	-5–+45	°C
Operating Humidity	–	–	–	≤85	%
Environmental Class	–	–	–	IP35	–
RF Connector	–	–	–	MINI DIN-Female	50 Ω
MTBF	–	–	–	≥50000	h
Monitor Interface Local / remote monitor	–	–	–	RS232, RJ45, LTE modem	
Alarm Type	–	–	–	No power, over temperature, RU fa	

Network Management · Noclia

Managed by **Noclia** (KT-S platform, S200 NMS) — local and remote status monitoring, fault alarm and remote supervision for Kingtone repeaters.

NMS module **S200 NMS** Local / remote interfaces **RS232, RJ45, LTE modem**

Boundary of support: Noclia S200 provides access monitoring, fault alarm and remote supervision for Kingtone repeaters. Integration or configuration of third-party equipment is reviewed case by case.

Compliance & Boundary of Use

Radio frequency use, equipment type approval and certification are subject to the requirements of the authority in the destination country. Confirm the assigned frequencies and licence before deployment.

Certification: Handled per destination market. This model is not listed on the CE (RED), RoHS 2.0 or SRRC certificates currently on file; where a market requires mandatory approval, the equipment is submitted for testing and certification under the applicable local regulations.

Products are exported under the KINGTONE brand; current certificates are issued under the JIMTOM® registered product mark. Trademark details: https://www.kingtonesolutions.com/about/

Kingtone Solutions Co., Ltd.
Block B, Yucheng Base, Fengze High-tech Park, Quanzhou, Fujian, China

Current specification: https://www.kingtonesolutions.com/products/kt-f-l8l3l1-p0-b/

Scan for the current revision, or open the address above.

Specifications are typical values measured under the stated test conditions and are subject to change without notice. Availability may vary with national regulations. This document is for engineering selection only and is not a quotation or a contractual specification.