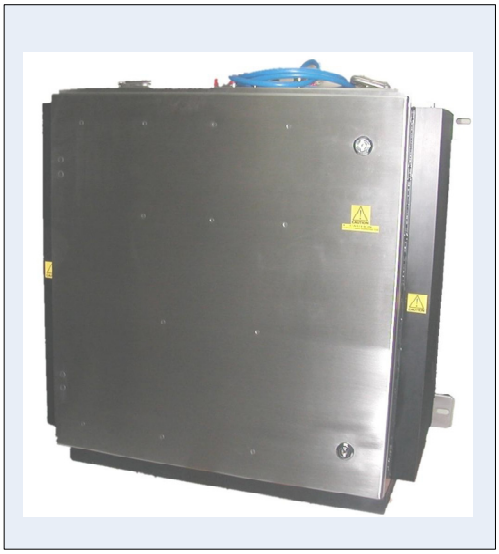
Fiber Optic Cell Enhancer



Applications:

- TETRA System
- Extended Coverage in Tunnel, In-Buildings
- Frequency 380~430Mhz

The Fiber Optic Cell Enhancer is an outdoor rated (IP65 and IP66 versions available) and natural air-cooled bi-directional Radio Frequency (RF) signal repeater operating in the 380~430 Mhz TETRA band via fiber optic cables. ***This product is customisable and can support other radio systems up to 3 Ghz.***

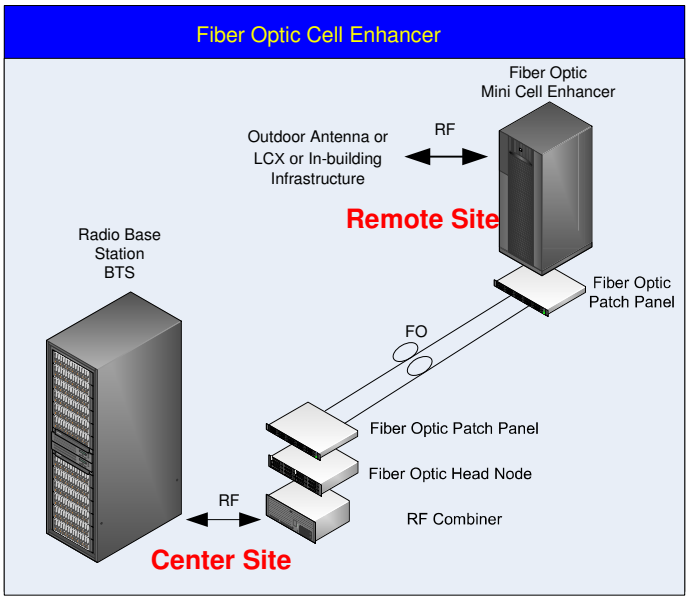
Typical application of the Fiber Optic Cell Enhancer is to improve RF signal coverage in areas such as underground tunnels, in-building car parks, offices and shopping malls for TETRA System.

The Fiber Optic Cell Enhancer provides 50dB to 80dB Gain to both downlink and uplink RF signals from the Base Stations via Fiber Transceivers, amplifying the signal in the blind spot areas to sufficient level for reliable 2-way communications.

Fiber Optic Cell Enhancer comes in various models, Low Power Model is designed for low output power of 5, 10 or 25 Watts (37dBm, 40dBm or 44dBm respectively, single carrier), suitable for small coverage areas.

Medium and High Power Model is designed for high output power of 50 or 100 Watts
(47dBm or 50dBm, single carrier) suitable for wide coverage areas.

The Fiber Optic Head Node converts signal between RF and Optical at the Center Site. The Head Node comes in 4 models, with 1, 2, 4 or 8 FO channels. Models supporting more than 2 channels operate together with a RF combiner to distribute RF signals from multiple Radio Base Stations.



Address:
39 Woodlands Close,
#06-33 Mega@Woodlands,
Singapore (737856)

Fiber Optic Cell Enhancer

Specifications:

MCE Electrical Specifications:

Models	MCE-1	MCE-5	MCE-10	MCE-25	MCE-50	MCE-100
Frequency Ranges	380~430 Mhz					
Nominal Impedance	50 ohm					
Minimum Return Loss	-18 dB					
Maximum Output Power (per channel)	1 Watt	5 Watts	10 Watts	25 Watts	50 Watts	100 Watts
Gain	50~80 dB (specified before order)					
Connector Type	N Type, Female					
Power	110/230 AC, 5A max.					

MCE Mechanical Specifications:

Dimension (LxBxH)	500x500x300mm
Weight	35 kg

MCE Environmental Specifications:

Operating Terperature	0~+55 ^{0}C
Humidity	95% non-condensing

Head Node Electrical Specifications:

Models	HN-1	HN-2	HN-4	HN-8
No of FO Channel	1	2	4	8
No of RF Tx/Rx Port	1/1	2/2	4/4	8/8
LED Wavelength	1310nm			
LED Output Power	>1mW (0dBm)			
Max LED Input Power	2mW			
Optic Receiver Sensitivity	-22dBm (Typ.)			
Fiber Connector	FC/APC			
Combiner Input Level	0~-20Bm	3~-17dBm	6~-14dBm	9~-11dBm
Combiner Return Loss	< -18dB			
Combiner Connector	N/SMA/UHF (specified before order)			
Power	110/230 AC, 2A max.			

Head Node Mechanical Specifications:

Dimension (LxBxH)Standard 19" Rack	3U	6U	6U	9U
Weight	25 kg max			

Head Node Environmental Specifications:

Operating Terperature	0~+55 ^{0}C
Humidity	95% non-condensing

Network Management: 1. Standard IBM compatible PC with Windows OS.
2. System Monitoring Via modem/IP/GSM .

Kent Microwave Devices

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