PRELIMINARY

...designed for perfect signals

ProLink RF-over-Fiber System

FLC TX/RX chassis variants

Made in Germany

GENERAL

The ProLink RF-over-Fiber system offers mechanical options in 1 & 3RU/19" design for flexible and high quality optical distribution of up to 16 RF signals (L-Band, IF*, 10MHz*) over a distance of up to 10km. The 1RU/19" chassis variants can be equipped with up to 6 optical TX/RX modules while the 3RU/19" chassis can be populated with up to 16 TX/RX modules. The chassis are designed to allow mixed configurations for insertion of L-Band, IF*, 10MHz* and/or TX/RX modules within the same chassis.

Furthermore the ProLink system offers various advantageous features such as Laser, Link and RF power monitoring as well as variable gain adjustment and switchable LNB-supply individually adjustable for each TX/RX module.

Configuration and monitoring of the ProLink System can easily being done locally via LC-Display or 5,7" touchscreen while remote configuration is available via its Ethernet-Interface (WebGUI, SNMP).

This professional fiber optic transmission system stands for perfect RF performance as well as error free signal distribution and is perfectly suited for Teleports, Satellite Earth Stations, Broadcasting and CATV/IPTV headend operations.

FLC102A/104A/106A Cassis (1RU/19")

FLC316A Cassis (3RU/19")

FEATURES

- 1RU/19" or 3RU optical transmission chassis for up to 16 optical TX/RX modules
- Compact & professional signal transmission (for L-Band, IF* and 10MHz* frequency-range)
- Up to 16 RF signals over fiber transmission (per chassis)
- Insertion of max. 16 ProLink TX and/or RX modules
- Hot swappable TX/RX modules
- Chassis variants supporting mixed TX/RX configuration
- Variable gain-adjust & RF power monitoring
- Switchable LNB-supply *(Option)*
- 1:1 power-supply redundancy (hot-swappable)
- Easy local & remote configuration & monitoring (Web-GUI, SNMP)
- LED´s displaying laser, link, psu & access status
- Optionally with potential free error-contact (DB9 female), 3 status levels (unit fail, power-supply fail, module fail)

**Upon request*

TECHNICAL SPECIFICATIONS

Dimensions:	1RU or 3RU/19",
Power-supply:	85...230V, 50/60Hz
Power consumption:	<100W
Frequency-ranges:	L-Band 950...2.150MHz IF 40...200MHz*, 10MHz*
TX/RX configurations:	see table below
TX/RX Module slots:	1RU/19", max. 6 slots 3RU/19", max. 16 slots
RF Connectors:	50Ohm SMA(f)/BNC(f)* 75Ohm F(f)/BNC(f)*
Local configuration:	LC-Display or 5,7" touchscreen
Remote config.:	Ethernet (Web-GUI, SNMPv2c)
RoHS:	Compliant

**Upon request*

CHASSIS ORDER INFORMATION & TX/RX configuration possibilities

Chassis Type	Chassis size	Max. Qty. Links	Max. TX/RX slots
FLC102A	1RU/19"	2	2 (TX and/or RX)
FLC104A*	1RU/19"	4	4 (TX and/or RX)
FLC106A*	1RU/19"	6	6 (TX and/or RX)
FLC316A	3RU/19"	16	16 (TX and/or RX)

**Upon Request*

PRELIMINARY

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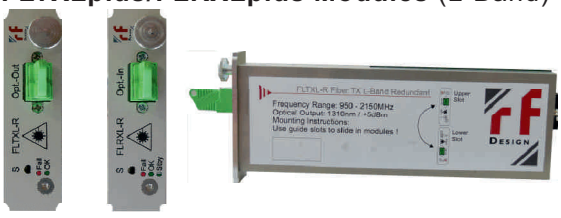
ProLink RF-over-Fiber System

Optical TX (Transmit) & RX (Receive) modules

Made in Germany

FLTXIplus/FLRXIplus Modules (IF)
FLTX10Mplus/FLRX10Mplus Modules (10MHz)

FLTXLplus/FLRXLplus Modules (L-Band)



FLTXIplus Optical Transmitter IF *(*upon request)*
*FLTX10Mplus Optical Transmitter 10MHZ** *(*upon request)*

Frequency range:	40...200MHz (FLTXI-R) 10MHz (FLTX10M-R)
RF Input connector:	via Chassis RF I/O ports
RF Input level:	0dBm max. 10dBm max. (FLTX10M-R)
Frequency response:	±0,5dB typ./ ±1,0dB max.
Return loss:	18dB (≙ VSWR: 1:1.29)
Optical Output connectors:	E2000 or SC/APC
Operating wavelength:	1310nm
Optical power:	+5dBm
Ip1:	+6dBm
Port matching:	all ports 18dB
Gain adjustment*:	-15...+15dB* *(*not f. 10MHz)*
RF power monitoring:	60dB
Status LED´s:	OK, Fail, Stand-by
Operating temperature:	0...45°C
Storage temperature:	-10°C...70°C
Humidity:	90% non-condensing
RoHS:	Compliant

FLTXLplus Optical Transmitter L-Band

Frequency range:	950...2150MHZ
RF Input connector:	via Chassis RF I/O ports
RF Input level:	0dBm max.
Frequency response:	±0,5dB typ./±1,0dB max.
Return loss:	16dB (≙ VSWR: 1:1.38)
Optical Output connectors:	E2000 or SC/APC
Operating wavelength:	1310nm
Optical power:	+5dBm
Gain adjustment:	-15...+15dB
RF power monitoring:	70dB
Status LED´s:	OK, Fail, Stand-byl
LNB supply:	13/15/18V, 22kHz, 400mA
Operating temperature:	0...45°C
Storage temperature:	-10°C...70°C
Humidity:	90% non-condensing
RoHS:	Compliant

FLRXIplus Optical Receiver IF *(*upon request)*
*FLRX10Mplus Optical Receiver 10MHZ** *(*upon request)*

Frequency range:	40...200MHz (FLRXI-R) 10MHz (FLRX10M-R)
Optical Input connectors:	E 2000 or SC/APC
Operating wavelength:	1310 - 1560nm
Optical Input level:	0dBm max.
RF Output connector:	via Chassis RF I/O ports
Frequency response:	±0,5dB typ./ ±1,0dB max.
Return loss:	18dB (≙ VSWR: 1:1.29)
Gain adjustment*:	-15...+15dB* *(*not f. 10MHz)*
RF power monitoring:	60dB
Status LED´s:	OK, Fail, Stand-by
Operating temperature:	0...45°C
Storage temperature:	-10°C...70°C
Humidity:	90% non-condensing
RoHS:	Compliant

FLRXLplus Optical Receiver L-Band

Frequency range:	950...2150MHz
Optical Input connectors:	E 2000 or SC/APC
Operating wavelength:	1310 - 1560nm
Optical Input level:	+10dBm max.
RF Output connectors:	via Chassis RF I/O ports
Frequency response:	±0,5dB typ./ ±1,0dB max.
Return loss:	16dB (≙ VSWR: 1:1.38)
Gain adjustment:	-15...+15dB
RF power monitoring:	70dB
Status LED´s:	OK, Fail, Stand-by
Operating temperature:	0...45°C
Storage temperature:	-10°C...70°C
Humidity:	90% non-condensing
RoHS:	Compliant

Link Specifications (10MHz & IF modules)

IMA3 @ -10dBm @ 0dB Gain:	< -66dBc
IP1:	+10dBm
Noise Figure:	< 23dB
Spurious free dynamic range:	109dBm/Hz
RF output power:	+10dBm max.

Link Specifications (L-Band modules)

IMA3 @ -10dBm:	< -60Bc
IP1:	+15dBm
Noise Figure:	< 20dB
Spurious free dynamic range:	106dBm/Hz
RF output power:	+10dBm max.

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