

Interface Unit (IFU)

Advantages

Highly configurable to suit various field applications.

Efficient Power Supply for BUCs to 25W C-band, 20W X-band and 16W Ku-band.

Option for LNB power supply.

Provides 10MHz reference for BUCs and LNBs.

Multiplexes DC power and 10MHz on the IFL Coax Cable.

Passes FSK M&C signals to/from FSK-equipped modems.

Available with TX and RX options.



Terrasat's Interface Unit (IFU) provides a cost effective solution for applications requiring separate indoor power supplies and/or 10MHz reference.

In situations where the system traffic modem does not provide a BUC power supply or 10MHz reference, the IFU can be installed between the Modem and BUC to provide DC power and /or high stability 10MHz reference via the traffic IFL coax cable. The IFU can also accommodate an external reference input.

The IFU is configurable with options to provide Transmit-only support for BUCs or to include Receive support for LNBs. In addition, the IFU can be configured for power supply only, 10MHz only or complete power and 10MHz support.

Installed in a standard 19' rack, the IFU occupies only one rack unit (1.75") of rack space and is powered from AC mains.

Simple, plug-and-play installation requires no on-site configuration.

Optional 4:1 Combiner and 1:4 Divider Modules available for multi-carrier operations.

Choice of various connector options.

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Interface Unit (IFU) Specifications

L-Band, TX and RX

Frequency Range	950 to 1750 MHz
Insertion Loss	3.0 dB Max
Flatness	1.5 dB pk-to-pk max
VSWR in/out	1.5:1 Max
Impedance	50 Ohm standard 75 Ohm Optional

10 MHz Reference

Internal

Frequency	10MHz
SSB Phase Noise	-120dBc/Hz @ 10Hz -134dBc/Hz @ 100Hz -144dBc/Hz @ 1kHz -152dBc/Hz @ 10kHz -155dBc/Hz @ 100kHz -155dBc/Hz @ 1MHz
Stability	+/- 10ppb, 0 to 50°C (ref to 25°C)
Aging	+/- 0.1 ppm per year +/- 0.5 ppb per day
Tuning Range	+/- 5 ppm max
Level @ Tx Rx	-3 dBm to +6 dBm

External

Insertion Loss	5.0 dB max (splits to feed Tx and Rx)
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From the Modem

Insertion Loss	3.0 dB max
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FSK

Frequency Range	580-720 kHz
Insertion Loss	4.5 dB max

DC Power (internal)

BUC Supply	24 ± 0.5 V @ 6.0 A max 48 ± 1.0 V @ 4.0 A max
LNB Supply	22 ± 1.0 V @ 0.6 A max

AC Power (48VDC optional)

Line Voltage	100-120VAC, 200-240VAC (auto ranging)
Line Frequency	47-63 Hz
Current	3.6 A max (IFU fully configured)

Connectors

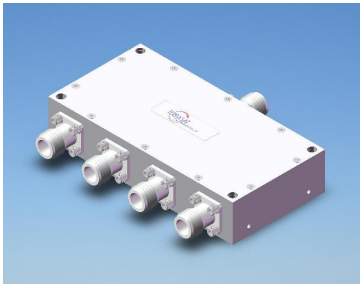
TX, Modem	N(f)50Ω, F(f)75Ω or SMA(f), Opt.
TX, BUC	N(f)50Ω, F(f)75Ω or SMA(f), Opt.
RX, Modem	N(f)50Ω, F(f)75Ω or SMA(f), Opt.
RX, LNB	N(f)50Ω, F(f)75Ω or SMA(f), Opt.
Reference	SMA(f), BNC(f), Optional Can be configured to accept external 10MHz reference or with a 10MHz output port.

Environmental

Operating temp.	0 to 50°C
Relative Humidity	90% non-condensing
Cooling	Forced Air

Mechanical

Dimensions	19" (W)x8.5"(D)x1.75"(H) 483mm x 216mm x 45mm
Weight	8 lbs (3.7kg)



Now Available:
4:1 Combiner/Divider module.
Enables multiple modem/carrier operations.
Passive unit mounts on standard equipment racks.
Passes L-band, DC, FSK and 10MHz reference signals.
Interfaces: 50Ω (N type) standard, 75Ω (f type) optional.