



High Resolution Video Fiber Optics Short-Haul Quality FM Video Link

Model LL700



The Meret Live Link model LL700 is a single-channel fiber optic system designed to meet EIA/TIA-250C short-haul video specifications providing superior, transparent signal quality transmission of broadband video and audio signals.

The Meret LL700 system provides superior-quality video image transmission for a wide variety of applications including broadcast, medical imaging and distance learning.

The Meret LL700 system features wide deviation FM modulation with AFC. Other features include DC feedback clamp and common mode rejection. Front panel features include video level adjustment and visual alarm indicators for video and optical power.

The Meret LL700 offers all the advantages of fiber optics over coaxial cable systems, including smaller, lighter cable and EMI/RFI immunity.

The input to the LL700 can include a video signal and two audio/data subcarriers.

Packaging options include a low-profile stand-alone enclosure that can sit on a desktop or be rack-mounted ("U-Box") and, for multiple system requirements, circuit cards ("G-Cards") that plug into a 6 slot rack mountable chassis with power supply ("CRM-2000").

APPLICATIONS

- Broadcast video communications
- Distance learning networks
- CATV
- Surveillance
- Transportation monitoring systems
- Medical imaging
- Teleconferencing

FEATURES

- Automatic frequency control
- Common mode rejection
- DC feedback clamp
- Front panel video level adjustment
- Visual alarm for video and optical power
- EIA/TIA-250C short-haul specifications

BENEFITS

- Transparent signal quality
- Singlemode or multimode fiber
- Quality FM modulation

Specifications

System Performance

Video Channels/Fiber	1
System Bandwidth	10 Hz - 10 MHz, (-3 dB) 100 kHz - 5 MHz, (± 0.15 dB)
Fiber Type	Singlemode or multimode
Loss Budget	20 dB
Operating Distance	> 40 km
Laser	-5.0 dBm, 1300 nm, typical
Detector	PIN diode
Optical Connector Type	ST

Video

Input Level	1 V p-p
Input Coupling	75 Ω DC
Input Return Loss	> 30 dB
Output Level	1 V p-p
Output Coupling	75 Ω DC
Output Return Loss	> 30 dB
Output Format	RS-170A NTSC/PAL
Differential Phase	< 0.7°
Differential Gain	< 2%
Luminance/Nonlinearity	< 2%
C/L Gain	± 2.0 IRE
C/L Delay	< ± 20 ns
Field Tilt	< 3.0 IRE
Line Tilt	< 1%
Pulse-Bar Ratio	< 4% (ref to input)
Modulation	FM
Signal-to-Noise Ratio (weighted)	> 67 dB (at 20 dB loss budget)
Connector type	BNC

Audio

Input Level	-10 dBm, ± 10 dB
Input Impedance	600 ohms, balanced or unbalanced
Connector	Terminal Strip
Input Frequency	30 Hz to 15 kHz
Pre-emphasis	75 μ sec.
S/C Frequency	9.0 MHz primary, 8.0 MHz secondary
S/C Output Level	24 to 44 dBmV, adjustable

Electrical/Mechanical

Power	100/120/220/240 VAC 50/60 Hz (others optional)
Temperature	0 - 40°C, operating
Humidity	95% non-condensing
Stand-alone enclosure	16"L, 16.73"W, 2"H
Weight	10 lb
Rackmount chassis	19"W x 7.0"H x 12.5"D
Weight	22 lb.
CRM-2000 rack-mount chassis houses up to 6 cards and power supply	
Plug-in card	10.5"L x 1.8"W x 7"H
Weight	2 lb

Specifications are subject to change without notice