

# FRS541100R00

## Four Channel Video Receiver

FRS541100R00-022609

### 5000 Series

PRODUCT SPECIFICATION



Rack Mount

### Description

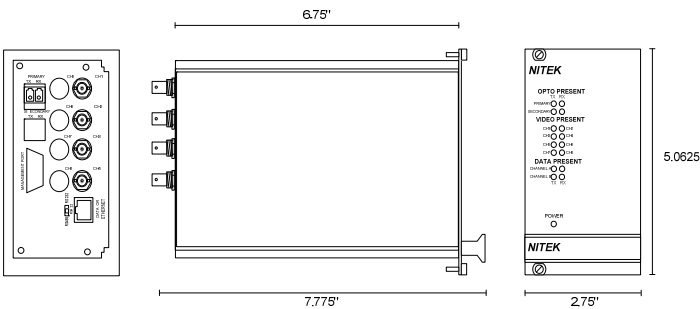
Nitek's **FRS541100R00** is a four channel Universal-Mode™ video receiver. Nitek's unique Universal-Mode™ optics allow the same unit to be used with 1 single-mode or multi-mode fiber optic cabling types.

The **5000 Series** fiber optic transmission systems are designed to provide multi-channel, point-to-point, broadcast quality video transmission at an affordable cost, without compromise. The video is transmitted in a real time full bandwidth digital format. This insures the highest quality regardless of distance. By transmitting the video in an uncompressed format, there is no latency or loss of video quality. The **5000 Series** uses Coarse Wavelength Division Multiplexing (CWDM) to transmit 2 wavelength channels for video transmission on a single optical fiber.

Automatic gain control is built into the **5000 Series** receivers making this a "plug-and-play" video system, requiring no field setup or adjustments. Receivers are equipped with LED indicators which provide an at-a-glance operating and optics state.

### Features

- Real time digital transmission eliminates signal degradation associated with distance.
- Universal-Mode™ allows the same unit to be used with multi-mode or single-mode fiber without any set up or field configuration.
- Wide dynamic range. No adjustments are required for installation, 'plug and play'.
- Configurations available in single fiber and twin fiber configurations.
- Receivers equipped with front panel LED status indicators provide at-a-glance diagnostics of the systems video and optics state.
- Front panel LED status indicators provide at-a-glance status monitoring.
- Modular rack mount card provides flexible system design.



### Ordering Information

Fiber Type	Part #	Compatible Transmitters	# Fibers	Loss Budget	Connector	Max Distance
Multi-Mode 62.5/125µm	<b>FRS541100R00</b>	<b>FTS541100S00</b>	1	17dB	LC	Multi-Mode Fiber 1,640 ft (3/10 mile)
Single-Mode 9/125 µm		<b>FTS541100R00</b>				Single-Mode Fiber >130,000 ft (24.5 miles)
Description	<b>FRS541100R00</b> Video Receiver					
Accessories	FSR1000 Sub Rack					



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### Video

Compression	None, uncompressed
Input / output level	1V P/P, nominal
Input / output impedance	75 Ohm unbalanced
Frequency response	10Hz to 5.57MHz min. 7.5MHz cut off
Differential gain	2%
Differential phase	2°
Signal to noise ratio	67dB, 10 bit conversion
Video connection	BNC
Optical connection	LC
Video standard	NTSC/PAL

### Optical

Accepts both multi- and single-mode fiber	
Multi-mode	62.5/125
Single-mode	9/125
Wavelength	1310nm
1550 option	1550nm
Single fiber option	1310/1550nm
CWDM	1310-1610nm
Path loss	17dB min.
HP option	22dB min.
CWDM option	22dB min.

### Data

Data interface	RS232, RS422 (full duplex, two wire) RS485 (half duplex, two wire) Slide switch selectable
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Data rate per channel	Up to 512kb/s w/o Ethernet Up to 256kb/s w/ Ethernet
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### General

Operating temperature	5° to 160° Fahrenheit
Operating humidity	0 to 95% non-condensing
Power requirements	12-24VAC or DC @ 300ma
Indicators	
Power	Green LED
Video sync	Green LED/channel

### Mechanical

Height	3U
Width	2 card slots
Depth	7.775"

In our continued effort to "Bridge the Gap in Technology", product specifications are subject to change without notice.

## System Design

