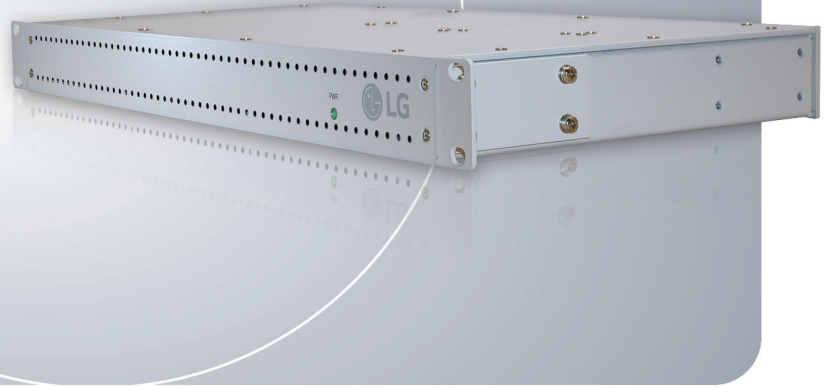# LG Pro:Centric® Server

▶ **PCS500R**

LG's PCS500R Pro:Centric® Server is the latest generation controller for the Pro:Centric system, offering a faster 64-bit Intel i3 processor with improved memory and storage capacity. The server enables system providers to create and remotely manage application content for LG commercial TVs over RF or IP distribution networks, using either the Pro:Centric Java Application (PCA) or the Pro:Centric Direct (PCD) HTML Application.

The PCS500R can also be used to remotely edit the televisions' FTG ("Free-To-Guest") channel map and installer menu configuration, reducing installation cost and future room visits.

The PCS500R supports eight 256-QAM channel output. One QAM channel is allocated for Pro:Centric data delivery and the other seven provide the ability to play 2 or 3 videos per QAM channel for a maximum of 21 video stream playouts from the server (depending on the bit rate and bandwidth). A dedicated Ethernet output port is also provided to enable IPv4 multi-cast broadcast of content over an IP network. Video files are stored on the internal Solid State Disk Drive (SDD).

The Pro:Centric server also supports delivery of 3rd Party developed Applications available from LG's software developer partners to Pro:Centric televisions, "OEM Mode".

Features

Simple Installation
Uses the existing RF/IP network, internet connection input, and modulated RF (QAM), IP or output.

Minimal Head-End Rack-Space
Small, lightweight chassis, 1U height profile, 19-inch rack-mountable.

High Reliability
The PCS500R design has 'no moving parts' with solid state memory and no internal disk to provide a highly reliable hardware platform.
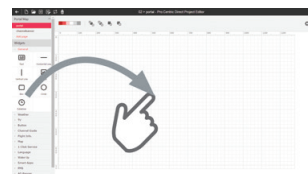
Remote Support
Remote administration, configuration, and maintenance via VPN server, Management of television channel map and installer menu settings.

Supports Pro:Centric Direct (PCD)
The PCS500R supports LG's Pro:Centric Direct, HTML5 Content Management Software. Pro:Centric Direct offers a comprehensive UI (User Interface) Editor, along with customizable widgets and multiple theme templates to enable system integrators to create a unique guest user experience and express the hotel's brand identity and individuality through LG's Pro:Centric In-Room television.

UI Editor

Drag & Drop Widgets

UI Design Templates

| Cinematic Type | Grid Type | Bar Type |

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LG Pro:Centric® Server
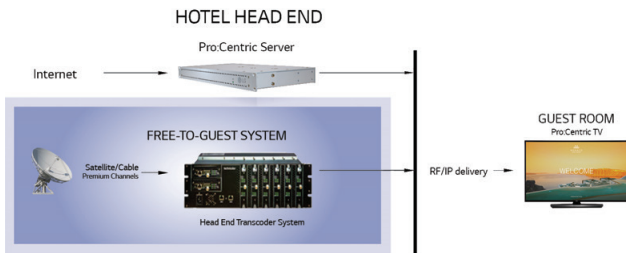
▶ **PCS500R**

SERVER ADMIN CLIENT

PCA or PCD Admin Client Graphical User Interface (GUI) is provided and is remotely accessible via the Internet using VPN service and a standard web browser, to provide System Integrator administration users with a full suite of features to manage and support the Pro:Centric system, including:

• System status and logs, and server settings
• Configuration for Channel lineup and Electronic Program Guide
• UI Editor and customization tools
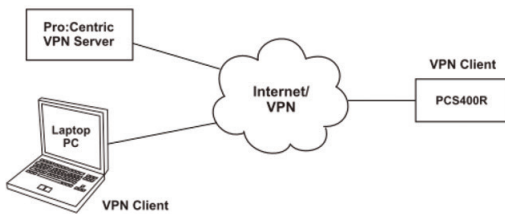• Managing television configurations settings and software updates

For further details, refer to the appropriate Pro:Centric™ Admin Client User Guide (also accessible on the system).

TYPICAL FTG Pro:Centric PCS500R INSTALLATION

PRO:CENTRIC VPN SERVER

Remote management of the PCS500R server is provided via a secure, built-in VPN client that connects to the LG's hosted VPN server. In this way, remote configuration management, remote software updates and other services are supported.
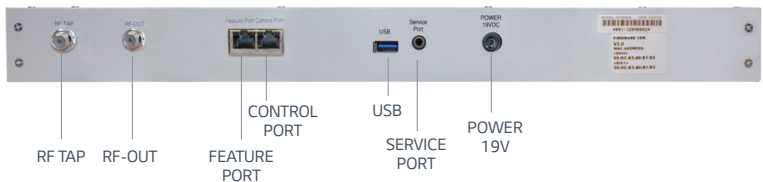

INSTALLATION REQUIREMENTS:

Installation of the PCS500R requires the following:

– 1U rack space in the Head-end room with 1U air flow gap
– Ethernet Connection (VPN and FTP open)
– 1 x 110/120VAC power outlet
– 1 coax drop to the RF combiner to feed the output of the server into the RF network or 1 Ethernet cable to connect Feature Port to the IP network switch

	Model	PCS500R
SYSTEM SOFTWARE	Software	Linux OS kernel 3.10
		PCA (Java) and PCD (HTML) server applications
ELECTRICAL	Data Output	RF, 100/1000T Ethernet
	Rear Port	RF/RF Tap/TTL serial, Ethernet 2 Port
	DC Input	+19V DC @ 2.2 Amps Adaptor
	RF Output Connectors (2)	75 Ohm, Type 'F'
	RF Output Span	Up to 8 Channels (Typically 48-64 MHz) (non-contiguous)
	RF Output Frequency Range	54 MHz to 865 MHz
	Active Output Level	-1 dBm (+47.75 dBmV) Typical
	Test Output Level	-47.75 dBm (+1 dBmV) Typical
	Frequency Accuracy	+/- 5 ppm
	Ethernet Connector (Control Port)	10/100/1000BaseT, RJ-45
	Ethernet Connector (Feature Port)	100/1000BaseT, Full Duplex RJ-45
	TTL-UART	Command Line Interface port (5V TTL)
	USB	1 x USB3.0 external connector for recovery/updates
	CPU/Memory / Storage	64-bit Intel i3-6100U (4 threads at 2.3GHz)
		16GB Memory
		128GB SSD
		Expandable storage with M.2 NGFF or 2.5" SSD
MODULATION SPECIFICATIONS	Standard	ITU-T J.83 Annex B (QAM-B)
	Constellations	64-QAM, 256-QAM
	Symbol Rate	64-QAM — 5.056941 MBaud
		256-QAM — 5.360537 MBaud
	Interleaving	Fixed I = 128, J = 1
	Standard	EN 300 429 V1.2.1 (DVB-C)
	Constellations	64-QAM, 256-QAM
	Symbol Rate	64-QAM / 256-QAM — 5.056 MBaud
		64-QAM / 256-QAM — 6.111 MBaud
		64-QAM / 256-QAM — 6.9 MBaud
	Standard	ABNT NBR 15601:2007 (ISDB-T)
	Parameters	64-QAM, 7/8 Convolutional Code, 1/32 Guard Interval Ratio, 2K FFT, 13 Segments
	Sample Rate	8.126984 Ms/s
ENVIRONMENTAL OPERATING CONDITIONS	Temperature	32° to 104° Fahrenheit
	Humidity	95% non-condensing
ENVIRONMENTAL STORAGE CONDITIONS	Storage Temperature	-4° to 158° Fahrenheit (-20° to 70° Celsius)
	Humidity	95% Non-condensing
CERTIFICATION	Regulatory Compliance	FCC, UL, RoHS
DIMENSIONS	Unit Dimensions (W x H x D)	19.0" x 1.7" x 8.5"
	Unit Weight (Rack-only)	5.65 lbs.
OTHER	Warranty	1 Year
	UPC	7 19192 64166 2

REAR VIEW

RF TAP   RF-OUT   FEATURE PORT   CONTROL PORT   USB   SERVICE PORT   POWER 19V

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