



Fraunhofer DCP Server Professional

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Subject to change without notice.
Please request individual quotation for binding prices.

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Broadcast Applications

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The Fraunhofer DCP Server Professional allows the processing of data streams based on the DCP protocol.

DCP stands for 'Distribution & Communication Protocol'. This protocol is standardized as ETSI TS 102 821 (www.etsi.org).

One of the protocols based on DCP is MDI – the 'Multiplex Distribution Interface' (ETSI TS 102 820) for DRM – Digital Radio Mondiale (www.drm.org).

MDI is the standard transmission format for the digital DRM Multiplex from the DRM Multiplex Generator (e.g. the Fraunhofer DRM ContentServer) to any DRM conforming Modulator.

Alternatively the MDI data stream can also directly be fed into a DRM software receiver for monitoring, e.g. the Fraunhofer DRM SoftwareRadio.

Functionality of the Fraunhofer DCP Server Professional

- console application, runs on
 - **Windows** 9x, ME, NT, 2000, XP
 - **Linux**
- versatile functionality:
 - DCP data stream **monitoring**
 - DCP data stream **forwarding/redirecting**
 - DCP data stream **multiplication** (unlimited number of target devices!)
 - DCP data stream **writing to/reading from file**
(in real time or with individual delays in between DCP packet)
 - DCP data stream **transformation** (DCP protocol parameters) and **conversion** (e.g. UDP/IP to serial etc.)
 - **processing statistics** when program finishes
 - 'endless' **loop-playback** when reading from file, optionally with **correction** of DCP internal counters and time stamps
 - **correction and refreshing** of forward error correction information (e.g. in multi-segment connections)



- Full support of all features of the DCP protocol:
 - contains a PFT en- and decoder incl. FEC (forward error correction), target-/source-addressing and fragmentation/de-fragmentation
 - output of fragments can be spread over time (including interleaving)
 - contains FILE-Layer support (writing/reading of DCP data to/from file)
 - supports as basic transmission layers (besides file):
 - UDP/IP reception/sending (uni- or multicast)
 - output to serial ports (e.g. COMx, dev/ttySx)
- Full support for DCP's TAG Packet functionality:
 - display of all TAG Items carried within a TAG Packet
 - supports individual bit length of TAG Items (not just full byte length)
 - supports multiple TAG Items with identical name/ID within one TAG Packet
- The Fraunhofer DCPServer Professional allows the definition of
 - one Input-Device (source of a DCP stream):
 - reception of DCP data via UDP/IP or from file
 - reception from UDP/IP unicast- or multicast addresses
 - optional filtering of incoming UDP/IP packets according to source address
 - display of the time of reception of each DCP data packet relative to the start of the program
 - reading from file in can be performed in real time, as quick as possible or with fixed delays in between the processing of DCP Packets
 - as well as optionally any number of Output-Devices (targets of the DCP stream):
 - all received information is automatically forwarded to all defined DCP output devices
 - for every single output device an individual basic transmission layer (UDP/IP unicast, UDP/IP multicast, file, serial) as well as individual DCP format parameters (AF, PFT, fragmentation, forward error correction, addressing,...) can be specified
- If required, the DCPServer Professional can automatically stop after a predefined amount of time or received data.
If required, every output device can optionally be deactivated after a predefined amount of time or a certain amount of written data.
- When quitting the tool, the Fraunhofer DCPServer Professional provides a detailed statistics for the input device as well as every defined output device: number of received DCP Packets, number of detected invalid DCP Packets in the input stream, number of not successfully sent DCP Packets per output device, etc.
- The Fraunhofer DCPServer Professional provides the conversion of MDI/DCP data streams into the IPIO or SUDP_BM format respectively, as well as the output of these formats via serial line. This format is required to connect to first generation Transradio (Telefunken) DRM Modulators.