

# polistreamMSX

## Feature comparison

| Licence types  | MSX Data Logger                       | MSX-L  | MSX Workstation                     | MSX Logger Playback                 | MSX Remote                                       | MSX Remote with Logger                           | MSX Remote for Review Server <sup>1</sup>        |
|--|---------------------------------------|--|-------------------------------------|-------------------------------------|--|--|--|
| <b>Key features</b>  |                                       |  |                                     |                                     |  |  |  |
| Subtitle monitoring - real-time  | <input type="checkbox"/> <sup>2</sup> | <input checked="" type="checkbox"/>              | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/>              | <input checked="" type="checkbox"/>              | <input type="checkbox"/>                         |
| Subtitle monitoring - off-line<br>Playback from file or Data Logger archive (see details below).   | <input type="checkbox"/>              | <input type="checkbox"/>                         | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/>              | <input checked="" type="checkbox"/>              | <input checked="" type="checkbox"/>              |
| Users supported<br>For more users, add MSX systems.  | n/a                                   | 1  | 1                                   | 1                                   | 6 <sup>3</sup>                                   | 6 <sup>3</sup>                                   | 1 or 2   |
| Subtitles displayed by each MSX system<br>For more subtitles, add MSX systems.   | n/a                                   | 1-9  | 1-64                                | 1-64                                | 1-64   | 1-64   | 1-10   |
| Technical data analysis tools  | <input type="checkbox"/>              | <input type="checkbox"/>                         | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/>              | <input checked="" type="checkbox"/>              | <input type="checkbox"/>                         |
| Video support  | <input type="checkbox"/>              | <input type="checkbox"/>                         | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> <sup>4</sup> | <input checked="" type="checkbox"/> <sup>4</sup> | <input checked="" type="checkbox"/> <sup>4</sup> |
| <b>Subtitle decoders</b>   |                                       |  |                                     |                                     |  |  |  |
| Teletext Decoder<br>Support for ETSI EN 300 472 & ETSI EN 301 775. Support for inverted Teletext. Primarily intended for subtitle decoding, but basic magazine page decoding is supported.<br>Decoded subtitles can be included in a display layout.<br>Activity signature produced for Channel Monitor to perform further analysis.<br>Debug character set for analysing character coding errors. Monitoring of faults with alarm triggers. | <input type="checkbox"/>              | <input checked="" type="checkbox"/> <sup>5</sup> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/>              | <input checked="" type="checkbox"/>              | <input checked="" type="checkbox"/>              |
| DVB subtitle decoder<br>Support for ETSI EN 300 743 versions 1.2.1, 1.3.1 & 1.4.1.<br>SD, HD & 4K support.<br>Decoded subtitles can be included in a display layout.<br>Activity signature produced for Channel Monitor to perform further analysis.<br>Technical display of subtitle data stream, monitoring of faults with alarm triggers.   | <input type="checkbox"/>              | <input checked="" type="checkbox"/> <sup>5</sup> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/>              | <input checked="" type="checkbox"/>              | <input checked="" type="checkbox"/>              |

<sup>1</sup> MSX Remote for Review Server is part of MSX Review, and cannot be purchased separately.

<sup>2</sup> MSX Data Logger provides real-time subtitle data logging but does not provide real-time decoding, analysis or display of subtitles. Use another system (e.g. MSX Workstation or MSX Logger Playback) for off-line playback of the Data Logger archive.

<sup>3</sup> Supports 1 local user. The other users can access MSX using a Remote Viewer application.

<sup>4</sup> Video is supported within the MSX Remote Viewer application. (MSX Remote Preview for MSX Review.)

<sup>5</sup> For MSX-L, a license must be purchased for the number of decoders which are used.

| License types  | MSX Data Logger                     | MSX-L  | MSX Workstation                     | MSX Logger Playback                 | MSX Remote                          | MSX Remote with Logger              | MSX Remote for Review Server <sup>1</sup>        |
|--|-------------------------------------|--|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|--|
| <b>Closed Caption decoder</b><br>Support for CEA-608-E & CEA-708-D.<br>Decoded subtitles can be included in a display layout.<br>Activity signature produced for Channel Monitor to perform further analysis.<br>Technical display of data stream, monitoring of faults with alarm triggers.   | <input type="checkbox"/>            | <input checked="" type="checkbox"/> <sup>5</sup> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/>              |
| <b>Imitext Decoder</b><br>Screen proprietary bitmap subtitle format. SD only.<br>Decoded subtitles can be included in a display layout.<br>Activity signature produced for Channel Monitor to perform further analysis.<br>Technical display of subtitle data stream, monitoring of faults with alarm triggers.  | <input type="checkbox"/>            | <input checked="" type="checkbox"/> <sup>5</sup> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/>              |
| <b>SCTE27 Decoder</b><br>Support for SCTE 27 2011. SD & HD support.<br>Decoded subtitles can be included in a display layout.<br>Activity signature produced for Channel Monitor to perform further analysis.<br>Monitoring of faults with alarm triggers.   | <input type="checkbox"/>            | <input checked="" type="checkbox"/> <sup>5</sup> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/>              |
| <b>Monitoring features</b>   |                                     |  |                                     |                                     |                                     |                                     |  |
| <b>Display HD</b><br>Customisable, interactive displays for local viewers. Shows subtitles, status and alarms.<br>Layout switching by user or from MSX automation triggers.<br>User-defined layouts containing subtitle and status cells. Multi-monitor support.   | <input type="checkbox"/>            | <input checked="" type="checkbox"/>              | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/>              |
| <b>Remote View server</b><br>Allows the MSX Remote Viewer application to view an MSX display from any networked PC.<br>Up to 5 MSX Remote Viewer sessions are available – add extra MSX systems for more capacity.<br>MSX Remote Viewer supports a single video source display with supported video capture card.  | <input type="checkbox"/>            | <input type="checkbox"/>                         | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> <sup>6</sup> |
| <b>TS Demux</b><br>Filters transport streams based on PID and packet content (e.g. if containing PCR). Displays service and program data and detailed PID statistics (active PIDs, CI errors).   | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/>              | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/>              |
| <b>Alarms</b><br>Collates alarm triggers from other units, such as decoders and the Channel Monitor, and signals appropriate cells in the display layout to be highlighted with warning or error frames (a yellow or red border).<br>Can trigger actions when alarm state changes: <ul style="list-style-type: none"> <li>• Audible alarms</li> <li>• GPIO trigger</li> <li>• Polistream events (which can be used to trigger SNMP)</li> </ul> Alarms are optionally logged to text log files. | <input checked="" type="checkbox"/> | <input type="checkbox"/>                         | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>                         |

<sup>6</sup> MSX Remote for Review Server is restricted to only two sessions for remote viewers.

| License types  | MSX Data Logger                     | MSX-L                               | MSX Workstation                     | MSX Logger Playback                 | MSX Remote                          | MSX Remote with Logger              | MSX Remote for Review Server <sup>1</sup> |
|--|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|---|
| <b>Automation Manager</b><br>Allows features of MSX to be triggered by various mechanisms.<br>Trigger sources: <ul style="list-style-type: none"> <li>Alarms (optionally trigger on ok, warning or error states)</li> <li>Channel Monitor (trigger when there is activity on a signature)</li> <li>Event Monitor (trigger when a Polistream event triggers, for example from a GPIO card input)</li> </ul> Features which can respond to triggers: <ul style="list-style-type: none"> <li>Alarms (confirm alarm)</li> <li>Display HD (layout selection)</li> <li>Channel Monitor (enable inactivity alarms, enable/disable a source comparison)</li> </ul> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/>       |
| <b>Event Monitor</b><br>Convert Polistream event triggers into MSX automation triggers.<br>Combine a number of Polistream events into a signature, used to reproduce a reference opt-out signal for comparison with opt-out signals decoded by the Teletext Decoder & OptOut Monitor.  | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>                  |
| <b>PES Builder</b><br>Extracts packetized elementary streams from transport stream PIDs for use by PES packet decoders and analysers, and writing to a PES file.   | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/>       |
| <b>Technical data analysis tools</b>   |                                     |                                     |                                     |                                     |                                     |                                     |   |
| <b>Polistream Status</b><br>Produces a cell for inclusion in a display layout which summarises the status of a Polistream system, highlighting transmission system faults.<br>Optionally trigger MSX alarms when Polistream fault states are detected.   | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>                  |
| <b>Channel Monitor</b><br>Analyses subtitle activity timelines, comparing the activity signatures of sources to detect missing, extra or poorly timed subtitles.<br>Also used to verify opt-out periods in conjunction with the OptOut Monitor.  | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>                  |
| <b>Polistream Channels</b><br>Subtitle file playout statistics from Polistream transmission system, producing reference subtitle signatures for analysis in the Channel Monitor.   | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>                  |
| <b>OptOut Monitor</b><br>Decodes opt-out signalling from Teletext data (Oliver or packet 31 format), producing opt-out signatures for analysis in the Channel Monitor.   | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>                  |
| <b>TS Utilities</b><br>Bitrate graph for a transport stream (optionally filtered to 1 or more PIDs by the TS Demux).<br>Full raw data display of transport stream packets.   | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>                  |
| <b>PES Analyser</b><br>Graph of PTS analysis to detect early or late packet delivery.<br>Graph of PES packet size.<br>Full raw data display of PES packet, with breakdown of PES packet sections.  | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>                  |
| <b>Audio Utilities</b><br>AD (audio description) fade & pan signalling displayed from MPEG audio.  | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>                  |

| Licence types  | MSX Data Logger                     | MSX-L                               | MSX Workstation                     | MSX Logger Playback                 | MSX Remote                          | MSX Remote with Logger              | MSX Remote for Review Server <sup>1</sup> |
|--|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|---|
| <b>Data interfaces</b>   |                                     |                                     |                                     |                                     |                                     |                                     |   |
| <b>Data Server Link</b><br>Access to data streams from Polistream Data Server.<br>Use Feed units to request and process data such as: <ul style="list-style-type: none"> <li>• transport stream from Polistream ASI card or UDP multicast</li> <li>• Teletext data from Polistream CVBS or SDI input</li> <li>• Closed Caption data from Polistream CVBS or SDI input</li> <li>• Lmitext data</li> <li>• Polistream Events (for triggering MSX automation or for opt-out monitoring)</li> <li>• Channel Server data (for use in Polistream Channels and Channel Monitor)</li> <li>• Polistream system status data</li> </ul> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/>       |
| <b>Network Port (UDP multicast)</b><br>Receive UDP multicast transport streams (SPTS & MPTS).  | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/>       |
| <b>Network Port (GDP)</b><br>Access to data streams from Polistream. Transport stream (including PCR), Lmitext data, Teletext data and IBIS data (Nufor).<br>(Data Servers are the preferred interface. This feature is for supporting legacy systems.)  | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/>       |
| <b>Polistream Link</b><br>Access to status data from Polistream. Channel Server data (for use in Polistream Channels and Channel Monitor), and Polistream system status data.<br>(Data Servers are the preferred interface. This feature is for supporting legacy systems.)  | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/>       |
| <b>Serial Port</b><br>Access to data streams from serial ports.<br>(Data Servers are the preferred interface. This feature is for supporting legacy systems.)  | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/>       |
| <b>File support</b>  |                                     |                                     |                                     |                                     |                                     |                                     |   |
| <b>Data Logger archive recording</b><br>Recording of data streams to an archive (*.ac & *.blk).<br>Data Mux units used to multiplex data into a Data Logger stream.  | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/>                  |
| <b>Data Logger archive playback</b><br>Playback of data streams from an archive (*.ac & *.blk).<br>Data Demux units used to extract data from Data Logger stream.  | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>                  |
| <b>TS file</b><br>Recording and playback of transport stream files (*.ts).   | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>                  |
| <b>PES file</b><br>Recording and playback of packetized elementary stream files (*.pes).   | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>                  |
| <b>Teletext file</b><br>Recording and playback of Teletext data stream files (*.ttx).  | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>                  |
| <b>Serial file</b><br>Record and playback raw binary data files (*.lst).   | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>                  |
| <b>Subtitle file</b><br>Preview transmission of subtitle files (*.chk).  | <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/>       |

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|--|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|---|
| Polistream MSX system<br>File containing the settings for an MSX monitoring system (*.psm).  | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/>       |
| MSX configuration design file<br>File containing the details of a configuration design (*.psm-xml).<br>Service-orientated design of MSX monitoring systems which are then built into .psm files. | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/>       |