

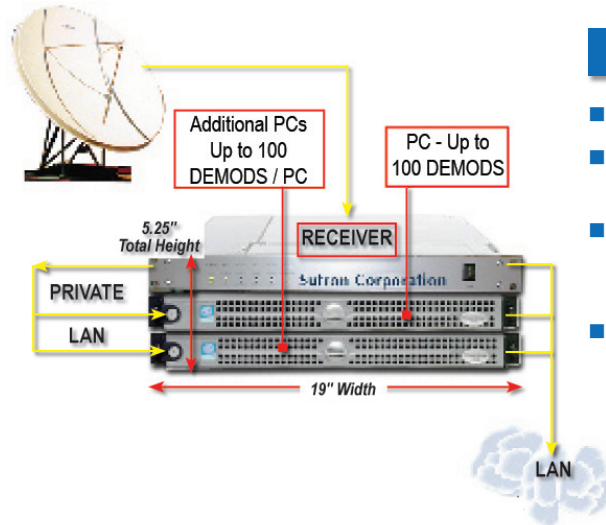
GOES DIGITAL SATELLITE RECEIVER DIRECT READOUT GROUND STATION



HIGH DATA RATE RECEPTION: 100-300-1200 BPS

FEATURES

- Pilot tone (beacon) tracking & DCP demodulators are implemented completely in software on PCs.
- A single PC supports up to 100 channels of any baud (100, 300 or 1200).
- Multiple PCs can support 100 channels or more! Once the DSR II receiver is installed, standard PCs plus DSR software support as many channels as needed.
- User-defined software demodulators monitor any DCP channel, 100, 300 or 1200 baud.
- The software provided with the system performs all the needed system functions to setup and operate the DDRGS.
- User-friendly Windows set-up
- A monitor program is provided to give a quick yet detailed view of the status of the beacon tracking & each of the demodulators.
- The DCP message data can be recorded on the PC or retrieved via a standard TCP/IP socket interface.
- NTP time synchronization



TYPICAL SYSTEM

- Antenna, 5 meter prime focus
- Integrated feed/LNA/downconverter (LNB)
- DSR receiver (Digital Satellite Receiver) with a network connection
- 1 or more PCs to run software pilot tracking & software demodulators

FUNCTIONS

- Reception of up to 100 channels with 1 PC
- Real-time acquisition of all channels
- Automatic reception quality control
- Output messages via LAN
- User-friendly Windows programs
- "Low implementation loss" demodulators
- Configurable demodulator characteristics

ADVANTAGES

- Expansion to 266 channels with additional PCs
- Demodulators do not use proprietary hardware.
- Low training & maintenance
- Software runs on standard Windows XP PCs
- Compatible with PCBASE2 & XConnect software
- Tools to troubleshoot reception problems
- Easier to install, support & expand

DEMODULATOR

- Implemented entirely in software on the PC
- No proprietary hardware used in demodulators
- Control via Windows program or LAN through socket protocol
- Output of received messages to disk or LAN through socket protocol
- User set modulation type (100, 300, 1200) and channel
- Low implementation loss
- User settable signal processing parameters: frequency, sweep range, natural frequency, AGC bandwidth, lock bandwidth, samples/symbol, preamble timeout
- User settable tracking parameters: natural frequency, PLL type, AFC parameters, damping factor
- Quality measurements of signal strength, frequency error, modulation index and parity errors
- Available debug output
- Available diagnostic output
- Simple to update

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ORDERING

RS-0-R-16-PCMT

DSR Receiver, 16 channel software license, mini-tower PC with Windows XP, cables & installation aids

RS-0-R-16-PCRM

DSR Receiver, 16 channel software license, rack mount PC with Windows XP, cables & installation aids

RS-0-R-04-PCMT

DSR Receiver, 4 channel software license, mini-tower PC with Windows XP, cables & installation aids (use MT in place of RM for mini-tower PC)

RS--R-04-PCRM

DSR Receiver, 4 channel software license, rack mount PC with Windows XP, cables & installation aids (use MT in place of RM for mini-tower PC)

RS-0-0-16-PCRM

16 channel add-on software license, rack mount PC with Windows XP

RS-0-0-16-PCMT

16 channel add-on software license, mini-tower PC with Windows XP

RS-0-0-04-PCMT

4 channel software license mini-tower PC

RS-0-0-04-PCRM

4 channel software license rack mount PC

DDRGS-REC

DSR Receiver

5000-0140

Antenna, 5m, EL/AZ mount, manual

5000-0140-2

Antenna, 5m, EL/AZ mount, 0-85 deg, manual

5000-0141

Antenna, 5m, polar mount, manual

5000-0142

Antenna, 5m, polar mount, motorized

3911-1092

Feed/LNB, no filter

3911-1093

Feed/LNB, filter

4141-1003

RG-8 cable

3121-1357

Type N connectors (2 required)

6661-1141-1

Installation kit w/compass, inclinometer, cable ties & tape



DON'T invest in DSP hardware demodulators because they

- Are proprietary.
- Are hard to upgrade.
- Are subject to obsolescence.
- Have limited flexibility and configurability.
- Offer limited diagnostics.



GO!



DO invest in Sutron's software demodulators because they...

- Run on standard PCs.
- Are easy to upgrade.
- Are compatible with the latest PCs to avoid hardware obsolescence.
- Offer full flexibility and configurability.
- Offer extensive diagnostics.

ORDERING OPTIONS

ICD DAPS DAMS

System compatibility with DAPS II Ingest Protocol

Analysis tools

Detailed monitoring of DCP channels Included: data dump tools for capturing raw data, spectrum analyzer tool & time domain analysis tool for showing baseband signals, phase error, carrier & clock lock status, AGC values, etc.

DDS Protocol

Client/service protocol to transfer DCP data over a network. DDS is in wide use among agencies that operate

REQUIRED PC 16 CHANNELS

- Rackmount, desktop or mini-tower design
- 1 processor @3.0 GHz or dual processors @1.5GHz with hyper-threading
- 40 GB disk, 256 MB memory
- Dual 10/100 Ethernet cards
- Windows XP operating system

DSR SPECIFICATIONS

Size	Standard 19" rack mount (1HU)
Supply Voltage	85-250 VAC
Temperature	0 to 35C
Humidity	10-90%
1st IF	130-150 MHz standard 30-200 MHz optional
Final IF	13.75 MHz
Output	IF Monitor, BNC for monitoring the signal or connection to WEFAX or GVAR receivers 802.3 Ethernet with 16 bit I/Q complex samples
Time Sync	NTP

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