



# Software Product Description

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**PRODUCT NAME: Power Demand Control for RSX-11M, Version 1**

**SPD 15.75.1**

**DESCRIPTION:**

The power demand applications software is a series of tasks that run under the RSX-11M real-time operating system. These tasks monitor electrical power demand and shut off or throttle back selected equipment to reduce peak power requirements. Flexible operation is provided by a large base of user-specified parameters.

English-like operator commands are used on the operator terminal for dialogue with the system. Meter and load status reports are available on request or on a scheduled basis. Historical data can be recorded on cassette for later play-back.

Equipment is shut down according to a user-specified priority list, lowest priority first. Equipment will not be shut down again before a user-specified cycle time in order to prevent excessive on/off cycling. When equipment is shut down, it remains off for a user-specified period of time. Up to 6 different off-times may be specified for each load during the 24-hour day. Operator override commands permit any load to be removed from system control and later be returned to full system control.

If the system forecasts that the pre-specified target demand value will be exceeded despite the maximum effort of the system to shed all available loads, a warning message will alert the operator to permit manual control of loads.

Once the system parameters have been entered or altered, a command can save the parameters on cassette. Several sets of parameters can be set up and saved. Later, the parameters can be reloaded into the system for quicker system start-up without re-entering the parameters.

A simulation mode provides a software simulated power meter. Repeatable power peaks are generated by the power meter and supplied to the system control programs. Parameters such as off-times and cycle-times can be "tried out" in simulation mode. Reports can be printed or data recorded just as with actual power meter connections.

**MINIMUM HARDWARE REQUIRED:**

Any valid RSX-11M operating system configuration which includes:

- PDP-11/10, 11/40, 11/45 with at least 16K words of memory, 8K words required for the Power Demand Control software, KW11-L clock (with PDP-11/40), and MR11-DB or BM792-YB ROM bootstrap.
- RK11 cartridge disk system
- TA11 cassette
- LA36, IT33, or LT35 console terminal
- UDC-11 or ICS-11 industrial subsystem and I/O assemblies.

**OPTIONAL HARDWARE:**

The Power Demand Control software product supports additional UDC I/o assemblies only.

**PREREQUISITE SOFTWARE:**

RSX-11M Real-Time Operating System, Version 2.

**OPTIONAL SOFTWARE:**

None

**TRAINING CREDITS:**

None

**SUPPORT CATEGORY:**

C — Software Support will be provided as listed in the Software Support Categories Addendum to this SPD.

**UPDATE POLICY:**

No updates are planned for this product.

**ORDERING INFORMATION:**

This software is furnished under a license for use on a single CPU and can be copied and modified (with inclusion of DIGITAL's copyright notice) only for use on such CPU, except as may otherwise be provided in writing by DIGITAL.

Standard options with no support services are only available after the purchase of one supported license. When a software license is ordered without support services, the category of support applicable to such software is Category C.

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Source and/or listing options are only available after the purchase of at least one binary license and after a source license agreement is in effect.

The following key (D, N, R) represents the distribution media for the product and must be specified at the end of the "Q" number, i.e., QJ630-CD = binaries on 9-track magnetic tape.

- D = 9-track Magnetic Tape
- N = Cassette
- R = Microfiche

*Standard Options*

QJ630 -C— Single-use license, binaries, documentation, no support services (media: N)

*Source/Listing Options*

- QJ630 -E— All sources (media: N)
- QJ630 -F— Listings (media: R)

**ADDITIONAL SERVICES:**

None