



Software Product Description

PRODUCT NAME: Power Management/301, Version 1

SPD 15.76.1

DESCRIPTION:

The Power Management/301 applications software monitors electrical power usage and shuts off, or throttles back, selected equipment to reduce peak power requirements and reduce total energy consumption. 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.

The system determines power usage levels through connections to the power metering equipment. Based on actual usage levels, power levels are forecasted and compared with a desired target level. Up to 96 load control outputs are shut off depending on the difference between target and forecasted demand values. Equipment is shut down according to user-specified priorities and will be turned on again after a specified off-time. Up to 6 different off-times can be specified during the 24 hour day. Equipment will not be shut down again before a cycle time has passed in order to prevent excessive on/off cycling.

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 operating 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 PDP-11:10, 11/40, 11/45 processor with 16K words of memory, KW11-L clock (with PDP-11/40), and BM873-YZ ROM bootstrap.

- TA11 cassette
- LA36, LT33 or LT35 console terminal.
- ICS-11 industrial subsystem and I/O modules.

OPTIONAL HARDWARE:

- Additional memory to a system total of 24K words.
- Additional ICS-11 I/O modules.

PREREQUISITE SOFTWARE:

None

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.

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

The following key (N, R, Z) represents the distribution media for the product and must be specified at the end of the "Q" number, i.e., QJ635-CN = binaries on cassette.

N = Cassette
R = Microfiche
Z = No hardware dependency

Standard Options

QJ635 -C— Single-use license, binaries, documentation, no support services (media: N)

Source/Listing Options

QJ635 -E— All sources (media: N)

QJ635 -F— Listings (media: R)

ADDITIONAL SERVICES:

None

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