PDP601

Exact-identity installation and commissioning guide

PRODUCT SCOPE

METSO PDP601 is a maxDPU MR distributed processing unit for the maxDNA control system. It executes process control, data acquisition and Model IOP processing while linking the installed rack to maxNET.

Verified installation basis

Product type	maxDPU MR distributed processing unit
Hardware identifier	LD181585
Control-system family	maxDNA
Operating system	Linux
Control processor	Intel Atom
I/O processing	Dedicated FPGA with 32-bit Altera NIOS processor
SD Flash	Minimum 2 GB industrial-grade removable media

Verified related ApterPower product pages

- METSO IOP301 isolated analog input module
- METSO DPU-MR processing unit
- ABB PM864AK01 processor unit kit
- ABB CMA130 display front panel

IDENTITY HOLD POINT

Confirm the complete METSO PDP601 / LD181585 identity, maxPAC rack position, network cabling, backup-pair role and current configuration before replacement or commissioning.

Pre-work control

Record the installed system before any disconnection

Required checks

- Record the complete PDP601 and LD181585 marking, rack position and active or inactive role before work.
- Place the affected process in its approved maintenance state and resolve severe alarms on the unit that will remain in service.
- Disable backup before removing a PDP601 from a configured redundant pair.
- Record Network A, Network B, I/O Link, backup cable, mode-switch position and all installed connectors.
- Preserve the approved SD Flash or prepare the replacement with the correct DPU name, IP settings and controlled configuration.
- Maintain at least a 1 inch cable bend radius and connect the backup and I/O Link cables only to their documented ports.

HOLD POINT

Confirm the complete METSO PDP601 / LD181585 identity, maxPAC rack position, network cabling, backup-pair role and current configuration before replacement or commissioning.

Evidence to retain

- Complete PDP601 and LD181585 marking.
- Approved project, rack and network records.
- As-found cables, mode switch and diagnostic states.
- Acceptance plan and final results.

Verified related ApterPower product pages

Honeywell FC-IOCHAS-0001R I/O chassis

HIMA F7131 power-supply monitoring module

Emerson KJ3222X1-BA1 HART input card

Schneider Electric 140XBE10000 rack expander

Installation sequence

Preserve identity, media, cabling and configured role

1 IDENTIFY

Record the complete PDP601 and LD181585 marking, rack position and active or inactive role before work.

2 STABILIZE

Place the affected process in its approved maintenance state and resolve severe alarms on the unit that will remain in service.

3 DISABLE

Disable backup before removing a PDP601 from a configured redundant pair.

4 RECORD

Record Network A, Network B, I/O Link, backup cable, mode-switch position and all installed connectors.

5 PREPARE

Preserve the approved SD Flash or prepare the replacement with the correct DPU name, IP settings and controlled configuration.

6 CONNECT

Maintain at least a 1 inch cable bend radius and connect the backup and I/O Link cables only to their documented ports.

CONFIGURATION CONTROL

Install PDP601 in the approved left-most rack position for airflow, preserve its DPU name, IP configuration and SD Flash database, and maintain the documented Network A, Network B, I/O Link and backup connections. Commissioning confirms processor health, IOM and I/O status, network states, backup readiness and cleared alarms.

Verified related ApterPower product pages

- Bently Nevada 330180-X1-05 Proximitor Sensor
- General Electric 531X111PSHAPG3 power supply card
- Schneider Electric 140DDM39000 mixed I/O module
- Honeywell SC-UCNN11 ControlEdge RTU controller

Commissioning and acceptance

Return each affected function to its approved state

Identity	Record the complete PDP601 and LD181585 marking, rack position and active or inactive role before work.
Configuration	Preserve the approved SD Flash or prepare the replacement with the correct DPU name, IP settings and controlled configuration.
Physical installation	Maintain at least a 1 inch cable bend radius and connect the backup and I/O Link cables only to their documented ports.
Startup	After insertion, verify the Linux boot sequence, front-panel diagnostics and absence of unexplained alarms.
Functional acceptance	Enable and warm the standby unit as required, then verify network, IOM, I/O, CP and State indications before release.
Release record	Document the final configuration, observed states, cleared alarms and responsible technician.

DIAGNOSTIC BOUNDARY

Do not release the unit with an unexplained Network, Backup, IOM, I/O, CP or State indication. Compare every observed state with the approved cabinet record.

Verified related ApterPower product pages

- METSO IOP301 isolated analog input module
- METSO DPU-MR processing unit
- ABB PM864AK01 processor unit kit
- ABB CMA130 display front panel

Handover record

Traceable evidence for the installed PDP601

Final acceptance

- Preserve the approved SD Flash or prepare the replacement with the correct DPU name, IP settings and controlled configuration.
- Maintain at least a 1 inch cable bend radius and connect the backup and I/O Link cables only to their documented ports.
- After insertion, verify the Linux boot sequence, front-panel diagnostics and absence of unexplained alarms.
- Enable and warm the standby unit as required, then verify network, IOM, I/O, CP and State indications before release.

Handover record

Installed identity	PDP601 and LD181585 marking, rack position and configured role
Configuration	DPU name, IP settings, SD Flash source and database status
Connections	Network A, Network B, I/O Link and backup cable record
Acceptance	Boot sequence, diagnostics, backup readiness and cleared alarms

Manufacturer evidence used

- Model PDP Series 600 maxDPU MR User's Guide, publication 278740 Rev. A7.
- Manufacturer sections for hardware identity, interfaces, installation, replacement and status diagnostics.

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