



SHORT GUIDE · INDUSTRY · ENERGY AND UTILITIES

Retyping meter cards, checking invoices by hand?

Now meter readings and invoices arrive as fields.

Meter reading cards, meter photos, maintenance records and supplier invoices reach the office on paper and as PDFs. This short guide shows how PaperOffice splits and reads them, handwriting included, and makes the values ready for billing. For municipal utilities and grid operators.

WHAT IT IS ABOUT

Meter number, reading and reading date as fields with their source, missing values as a review task, supplier invoices with line items and a duplicate hint, all ready for export to billing.

01 · THE PROBLEM

Many cards, one billing run. Every value gets retyped.

After a meter-reading round, field staff bring back stacks of handwritten reading cards, plus photos of meters nobody could reach. Meanwhile, invoices from service providers and upstream suppliers arrive by mail and email. Before billing runs, someone retypes meter number and reading and gathers the invoices.

WHY IT HAPPENS

Handwriting under time pressure

Readers note meter readings in stairwells, often with cold hands. A seven looks like a one, and a transposed digit shows up only when the customer disputes the annual bill.

Many channels, one inbox

Cards come in bundles from the field, photos from work phones, invoices by mail or to a shared mailbox. Each channel lands somewhere else, and nobody sees at a glance what has been captured.

Long invoices, many line items

Invoices from metering service providers, civil works and grid operators carry many line items. Whoever checks them lays invoice and order side by side, and an invoice submitted twice slips through easily.

HOW YOU NOTICE IT

- After every reading round, cards pile up that nobody has typed in yet.
- A customer disputes the bill, and the original reading card cannot be found.
- Meter numbers are written differently on the card and in the billing system.
- Photos of meters sit on work phones instead of with the other reading documents.
- An invoice came by mail and by email and was released for payment twice.

02 · THE WAY WITH PAPEROFFICE

Split, read, hand over.

Your billing system remains the system for contracts, meters and tariffs. PaperOffice takes in the papers before it, splits stacks into single cards, reads the values as fields and makes them ready for export.

1

Take in cards, photos and mail

Scanned card stacks arrive by scanner or upload in an inbox Workspace, meter photos go by Mobile App straight into the meter-reading Workspace. AI-DMS also reads images.

[MODULE: MOBILE APP](#)

2

Split stacks into cards

The Split Agent splits the stack by a fixed rule, such as one page per document, and places the cards in the meter-reading Workspace. Blank pages drop out.

[MODULE: SPLIT AGENT](#)

3

Read handwriting

At the Ultra tier, AI-OCR also reads handwritten reading cards and maintenance records, line by line with position. The text is then available in search.

[MODULE: AI-OCR](#)

4

Meter data as fields

In meter reading, an IDP Agent of your own reads meter number, reading, reading date and metering point. A missing required value creates a review task, included in the Professional plan.

[MODULE: IDP AGENT](#)

5

Invoices from the mailbox

A connector collects invoices from the email mailbox, each attachment as its own document. A template reads line items and amounts, and invoices that arrive twice stand out.

[MODULE: CONNECTORS](#)

03 · IN THE APP

How meter readings arrive without retyping.

This is how meter reading and billing set up the process. The basis is an inbox Workspace for batch scans, a meter-reading Workspace with AI-DMS Ultra for the split cards and an invoice Workspace with Premium.

1 Workspaces and Split Agent

Under **Document AI** › **Workspaces**, create Workspaces for inbox, meter reading and invoices. Under **Document AI** › **Split Agent** › **Create Split Agent**, save an agent with a fixed rule, one page per document, targeting meter reading.

2 Split the card stack

Select the stack in the inbox Workspace and choose **Actions** › **Agents & workflows** › **Split** › **Run via Split Agent**. Every card lands in meter reading as its own document, and the stack stays in the inbox.

3 Agent for reading cards

Select a card, open **Actions** › **Agents & workflows** › **IDP** and use **Free template (Vision Pro)** to create fields for meter number, reading, reading date and metering point. For the reading, choose **Required – HITL review**.

4 Review open cards

Choose a review queue in the agent and assign it to the meter-reading Workspace. The **IDP Review** view lists cards with a missing required value for review against the original.

5 Read invoices

For invoices with meter data, choose the **Utility Bill** template, for all others **Extract Invoice (Full)**. On the document, the **Possible Duplicate** hint shows an invoice that arrived twice, with its reason.

TIP FROM PRACTICE

Stacks to the inbox, cards to meter reading Scan card stacks into the inbox Workspace, which runs without an IDP Agent. The Split Agent places the cards in meter reading, and there the card agent reads each card on its own. The stack stays in the inbox as the original.

04 · AN EXAMPLE

A municipal utility bills without retyping cards.



A regional municipal utility with 60 employees supplies several towns with electricity, gas and water. After every reading round, the billing clerk takes over the field staff's card stacks and also checks invoices from metering service providers and civil works firms.

BEFORE

- The reading cards of one round sit in a stack on the desk.
- He types meter number and reading into the billing system, card by card.
- Photos of hard-to-reach meters stay on the work phones.
- He checks invoices on paper and searches the inbox when questions come up.

WITH PAPEROFFICE

- The stack goes to the inbox, and the Split Agent places every card in meter reading as a document.
- Ultra reads the handwriting, and the IDP Agent takes over meter number, reading and date.
- He reviews cards without a legible reading in the IDP Review view against the original.
- Invoices arrive read from the mailbox, and the fields go to billing as an export.

An invented example for illustration. Check for yourself how your reading cards are laid out, which fields your billing system expects and who assesses unusual readings.

05 · CHECKLIST

Is your billing ready for read meter cards?

Use these points to prepare meter reading and billing. The more clearly cards and fields are defined, the less ends up in review.

- ☐ Inbox, meter reading and invoices each have a Workspace of their own with suitable rights.
- ☐ Meter number and metering point are printed on every reading card.
- ☐ The reading is a required field, and a review queue is selected.
- ☐ The card agent is assigned to the meter-reading Workspace, and batch scans go to the inbox.
- ☐ The invoice mailbox is set up as a connector, and attachments become documents of their own.
- ☐ The meter-reading Workspace runs on AI-DMS Ultra, the invoice Workspace on Premium.
- ☐ The fields are set: meter number, reading, reading date, metering point, remark.
- ☐ The agent has been tested on real cards, including hard-to-read ones.
- ☐ The field staff's work phones are paired, and photos land in the meter-reading Workspace.
- ☐ Someone regularly checks the IDP Review view, and invoice review watches for the Possible Duplicate hint on the document.

06 · FREQUENTLY ASKED QUESTIONS

What billing and grid operations ask first.

How does PaperOffice work with our billing system?

Contracts, meters, tariffs and billing stay in your system. PaperOffice reads the documents before it. You pull readings and invoice data into your system as Excel, CSV or via the REST API, and AI assistants ask over MCP.

Do we need a template for every card type?

You describe the fields once in your own words, such as "reading as written on the card", or have them suggested from a sample card. A second card type, for water meters for example, gets an agent of its own.

Does PaperOffice read maintenance records too?

Yes. AI-DMS recognizes maintenance and measurement records as document types of their own. The Ultra tier reads handwritten entries, and an IDP Agent of your own pulls asset, date and defects as fields.

What happens to photos of meters?

The Mobile App uploads them from the work phone straight into the meter-reading Workspace, and AI-DMS also reads images. A test run with your own photos shows whether your agent reads the register reliably: value, confidence and source per field.

How do we find every document for a meter?

Enter the meter number in the search bar. Search finds it in the text of all documents, including scans and photos, and highlights the spot on the page. It searches the Workspaces you have rights to.

What happens to invoices that arrive twice?

With AI-DMS Premium, PaperOffice checks whether the content or the issuer's document number already exists in the account. A match appears on the document as **Possible Duplicate** with its reason, such as the same document number. You decide before anything is paid twice.

07 · HOW TO START

Read in your next meter-reading round.

Create an account at app.paperoffice.ai, upload a stack of reading cards to the inbox and split it into a Workspace with AI-DMS Ultra. You pay for what you process; the pricing page lists the tiers.

Test a billed round

Upload the cards of a round that has already been billed. You can then compare the readings with the values already in your billing system.

Agree on fields with billing

Decide which fields every card should deliver and in which format your billing system takes them over.

Assign the reviews

Decide who reviews cards without a reading and who settles invoices with a duplicate hint.

DATASHEETS ON THIS TOPIC

Mobile Apppaperoffice.ai/downloads/paperoffice-ai-datasheet-mobile-app.pdf**Split Agent**paperoffice.ai/downloads/paperoffice-ai-datasheet-pdf-split.pdf**AI-OCR**paperoffice.ai/downloads/paperoffice-ai-datasheet-ocr.pdf**IDP Agent**paperoffice.ai/downloads/paperoffice-ai-datasheet-idp-intelligent-document-processing.pdf**Connectors**paperoffice.ai/downloads/paperoffice-ai-datasheet-connectors.pdf**Smart Search**paperoffice.ai/downloads/paperoffice-ai-datasheet-smart-search.pdf

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