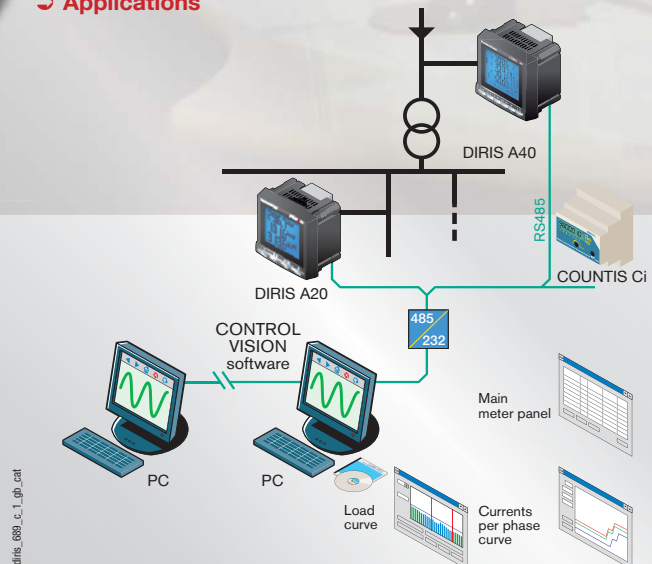


# CONTROL VISION software

Supervision



## Applications



*To configure, display and monitor DIRIS / COUNTIS*

## Function

**CONTROL VISION** is a metering and monitoring software for DIRIS Am, A10, A20, A40, A41, A60, Ap, M, Mh, C, CC, CM, CMv2, N300/N600 and COUNTIS Ci devices.

It operates in a Windows XP Service Pack 3 or Vista environment.

Minimum PC requirement: 1.0GHz processor with 512MB of RAM, 500MB of available hard drive space and a monitor with a minimum resolution of 1024x768. Communication with the devices is either directly via the Ethernet network, a serial port or the computer's USB connection.

The **CONTROL VISION** software is designed to communicate with all devices in the installation and create logs based on manual and automatic scanning.

**CONTROL VISION** will display all the electrical values measured and read the total energy consumption. The user can also create logs of several electrical values over a selected time period.

All these functions can be performed in relation to a DIRIS (corresponding to one output) or a predefined group of DIRIS (all outputs relating to a workshop, for example).

The user will also be able to import or export the configuration parameters with EXCEL. The ease of integration and modification of the number of products on this RS485 link makes this a long-lasting solution.

➤ General characteristics

- The CONTROL VISION software allows:
- remote configuration of DIRIS and COUNTIS Ci devices,
  - displaying all electrical parameters measured, energies, indices, alarms, harmonics and the configuration of all the devices,
  - creating readings, backups and automatic print-outs,
  - displaying, of DIRIS CM/CMv2/A40/A60 and COUNTIS Ci inputs:
    - table of min. 10P, corresponding load curve,

- displaying historical data for each DIRIS in tabular or graphical format:
  - immediate measurements,
  - harmonics values,
  - status changing of inputs / outputs.

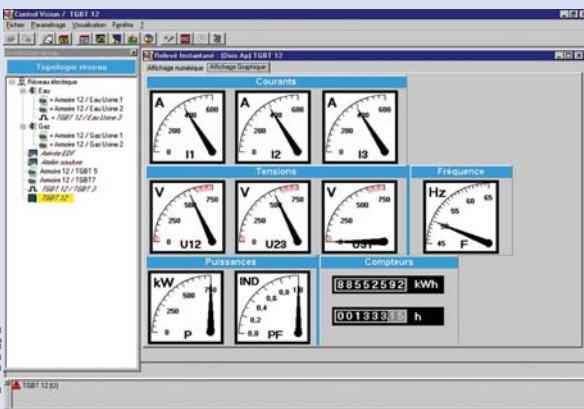
The CONTROL VISION software is available in a multilingual version comprising the following languages: english, french, german, italian, spanish.

➤ References

| Type   | CONTROL VISION software Reference |
|--|-----------------------------------|
| CONTROL VISION software                                | 4805 0000                         |
| CONTROL VISION software + INTRANET option (multi user) | 4805 0001                         |

➤ Functions

Instantaneous measurement display



All electrical values displayed either with digital values or analogue indicators, depending on the tab selected:

- currents,
- phase to phase voltage,
- powers,
- frequency,
- active energy and time meter (according to DIRIS) of the selected DIRIS.

Alarm levels (programmed in the device) are indicated in red.  
The parameters to be displayed can be customised.  
All screens are refreshed automatically.

Monthly general reading of COUNTIS Ci

| Nom                       | Janvier | Février | Mars  | Avril | Mai   | Juin  | Juillet |
|---------------------------|---------|---------|-------|-------|-------|-------|---------|
| <b>Eau</b>                | 5 L     | 0 L     | 0 L   | 0 L   | 0 L   | 0 L   | 0 L     |
| + Amoire 12 / Eau Usine 1 | 3 L     | 0 L     | 0 L   | 0 L   | 0 L   | 0 L   | 0 L     |
| + Amoire 12 / Eau Usine 2 | 2 L     | 0 L     | 0 L   | 0 L   | 0 L   | 0 L   | 0 L     |
| <b>Gas</b>                | 7 m3    | 0 m3    | 0 m3  | 0 m3  | 0 m3  | 0 m3  | 0 m3    |
| + Amoire 12 / Gas Usine 1 | 6 m3    | 0 m3    | 0 m3  | 0 m3  | 0 m3  | 0 m3  | 0 m3    |
| + Amoire 12 / Gas Usine 2 | 1 m3    | 0 m3    | 0 m3  | 0 m3  | 0 m3  | 0 m3  | 0 m3    |
| Amoire 12 / TGBT 5        | 0 kWh   | 0 kWh   | 0 kWh | 0 kWh | 0 kWh | 0 kWh | 0 kWh   |
| Amoire 12 / TGBT 7        | 0 kWh   | 0 kWh   | 0 kWh | 0 kWh | 0 kWh | 0 kWh | 0 kWh   |

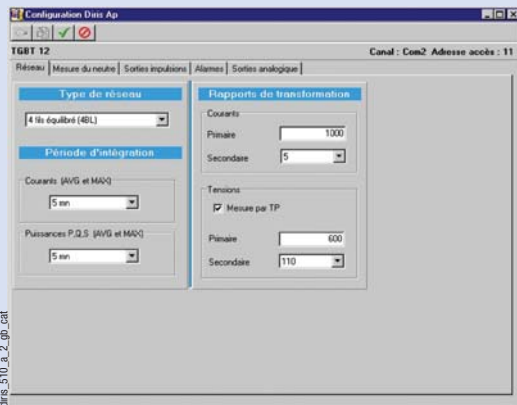
Monthly meter readings of all COUNTIS Ci present on the network. COUNTIS Ci memorises monthly consumption (energy or pulse), via each of their 7 inputs, the software retrieves the values and allocates them into the allocated "group". This screen may be printed and extracted manually by clicking on the respective pushbuttons.

General reading of measurements

| Nom                       | En + (kWh) | Er + (kvarh) | Es (kVAh)  | Cpt 1                    | Cpt 2 | Cpt 3           |
|---------------------------|------------|--------------|------------|--------------------------|-------|-----------------|
| <b>Eau</b>                | 0          | 0            | 0          | 4 971 285 L              |       |                 |
| + Amoire 12 / Eau Usine 1 |            |              |            | Eau Usine 1: 3 541 L     |       |                 |
| + Amoire 12 / Eau Usine 2 |            |              |            | Eau Usine 2: 336 L       |       |                 |
| + TGBT 12 / Eau Usine 3   |            |              |            | Eau Usine 3: 4 967 724 L |       |                 |
| <b>Gas</b>                | 0          | 0            | 0          | 5 196 m3                 |       |                 |
| + Amoire 12 / Gas Usine 1 |            |              |            | Gas Usine 1: 1 008 m3    |       |                 |
| + Amoire 12 / Gas Usine 2 |            |              |            | Gas Usine 2: 5 028 m3    |       |                 |
| Arrivée EDF               | 93 028     | 63 328       | 0          |                          |       |                 |
| Atelier soudure           | 89 316     | 22 572       | 0          |                          |       |                 |
| Amoire 12 / TGBT 5        | 252        |              |            |                          |       |                 |
| Amoire 12 / TGBT 7        |            |              |            |                          |       | TGBT 7: 242 kWh |
| TGBT 12 / TGBT 3          | 0          |              |            |                          |       |                 |
| TGBT 12                   | 88 582 408 | 1 808 218    | 88 918 345 |                          |       |                 |

Energy consumption table or metered pulses of all the DIRIS / COUNTIS Ci present on the network. This readout comprises (depending on the type of DIRIS) positive and negative active energy (kWh), positive and negative reactive energy (kVarh), apparent power (kVA) and pulses metered by the devices' on/off inputs. These pulses are configurable (name, weight and unit). These values can be added (or subtracted) in groups, allowing them to be grouped by type (electricity, water, gas, etc.). They can be printed and saved (Excel file) automatically (one file per day created at a set time, for example). This screen may be printed and extracted manually by clicking on the respective pushbuttons.

**Configuration of the devices**



Display window for viewing and configuring the parameters entered in DIRIS/COUNTIS. Each device's settings can be checked in a single window (divided into tabs depending on the options).

Modification of the following parameters are possible from this window using a password (depending on the options):

- type of network,
- CT and VT ratio,
- weight of pulse outputs,
- levels and assignment of the alarms,
- assignment of the 4/20 mA outputs and parameters,
- assignment and weight of the TOR inputs.

**General reading of the instantaneous measurement**

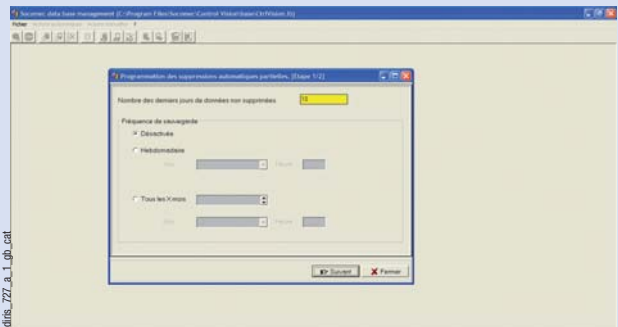
| Nom             | I1 (A) | I2 (A) | I3 (A) | IN (A) | V1 (V)  | V2 (V)  | V3 (V)  | U12 (V) | U23 (V) | U31 (V) | P (kW)  | Q (kvar) | S (kVA) |
|-----------------|--------|--------|--------|--------|---------|---------|---------|---------|---------|---------|---------|----------|---------|
| Activité EDF    | 1157   | 0      | 0      | 1157,5 | 229,63  | 229,89  | 229,61  | 397,87  | 397,85  | 397,62  | 0       | 265,5    | 265,5   |
| Atelier 8       | 736    | 0      | 0      | 736    | 229,4   | 229,1   | 229,5   | 397     | 397,1   | 397,4   | -168,3  | 13       | 168,8   |
| Atelier soudure | 231,7  | 0      | 0      | 232,3  | 230,64  | 229,43  | 229,93  | 397,82  | 397,73  | 398,26  | 0       | 53,3     | 53,3    |
| Chauffière      | 236,2  | 0      | 0      | -      | -       | -       | -       | 0       | 0       | 0       | -53,11  | -2,79    | 53,18   |
| TGBT 12         | 392,5  | 392,5  | 392,5  | 0      | 2153,13 | 1576,36 | 2149,26 | 584,13  | 580,26  | 3       | 2298,38 | 0        | 2305,05 |

Displayed in numerical format:

- currents,
- voltages,
- powers,
- frequency,
- power factor,
- electrical value in the alarm.

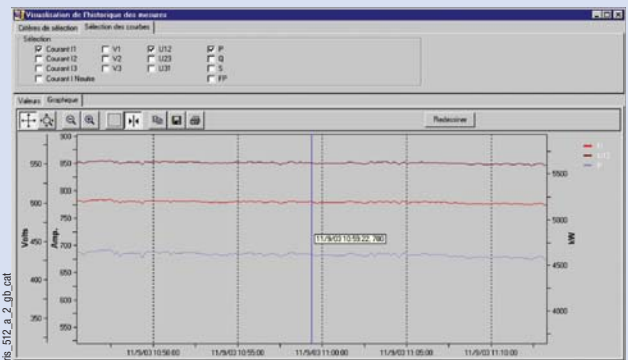
This screen may be printed and extracted manually by clicking on the respective pushbuttons.

**Managing the database (DMT)**



The DMT software (supplied with CONTROL VISION) is a database management tool. It helps ensure by automatic or manual action (complete or partial database backup and partial database deletion), thereby providing a database suitable for the efficient operation of CONTROL VISION.

**History of device measurements**



CONTROL VISION records the electrical parameters of the devices defined under "permanent scanning" into a central database. The scale of the graphical display can be selected and specific areas enlarged. The cursor allows obtaining the value / date time of an exact point where it is placed. All colours may be customized in order to complement the Windows environment. This screen may be printed and extracted manually by clicking on the respective pushbuttons.

General harmonics readings

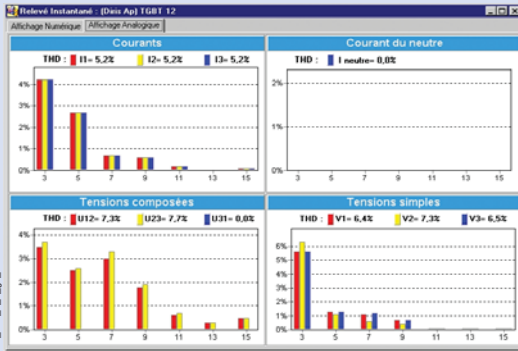
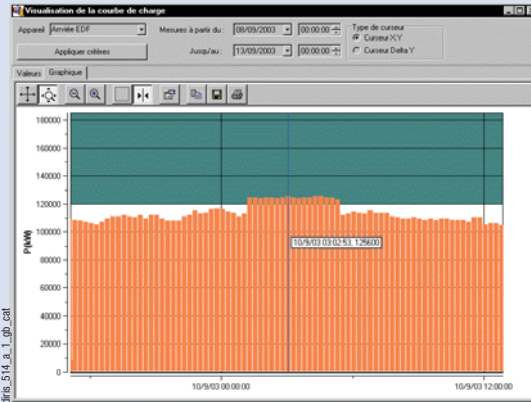


Table or bar graph showing harmonics for the selected device (DIRIS A40/A60) row by row for:

- the 3 currents and neutral (on the basis of the network type)
  - the simple and Ph-Ph and Ph-N voltages (on the basis of the network type).
- All colours may be customized in order to complement the Windows environment. All screens are refreshed automatically.

Load curve



The load curve gives a graphic image of the load on the network according to the selected period. DIRIS CM / CMV2 / A60 (A40 fitted with memory module) and COUNTIS Ci (via 4 inputs) regularly records the average values for a period (for example, 10 minutes); CONTROL VISION regularly retrieves and records the results in the database in order to format the load data in a table of all devices within CONTROL VISION.

The concerned devices are those configured in CONTROL VISION. On the graph, the orange section represents the average value of the power consumed during this period (10 minutes in this case), the green section represents the power zone outside the procured power (which the user has defined per product). This allows the user to quickly see (and zoom in on) the zone where the load has exceeded the value procured from the electricity supplier.

The cursor allows obtaining the value / date time of an exact point where it is placed. All colours may be customized in order to complement the Windows environment. This screen may be printed and extracted manually by clicking on the respective pushbuttons.

Power distribution

| Appareil       | Entree | Periode 1 : Ex | Periode 2 : Ex | Periode 3 : Ex | Periode 4 : Ex | Periode 5 : Ex | Periode 6 : Ex | Periode 1 : Ex | Periode 2 : Ex | Periode 3 : Ex | Periode 4 : Ex | Periode 5 : Ex | Periode 6 : Ex |
|----------------|--------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| Amare 12       | TGB17  | 0              | 0              | 0              | 381            | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| TGBT 12        |        | 1278           | 2493           | 884            | 2249           | 9381           | 4761           | 0              | 0              | 0              | 0              | 0              | 0              |
| Ardeur soudure |        | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| Armoire EDF    |        | 0              | 7525           | 0              | 3              | 0              | 0              | 161            | 60813          | 6              |                |                |                |

Display of the active and reactive energy consumption by period and by device. Each period is defined by a name, a time of starting and of ending. The concerned devices are those configured in CONTROL VISION. This screen may be printed and extracted manually by clicking on the respective pushbuttons.

Quality

| Date / Heure        | Fréquence moyenne (Hz) |
|---------------------|------------------------|
| 09/03/2007 22:29:30 | 50,01                  |
| 09/03/2007 22:29:40 | 50,02                  |
| 09/03/2007 22:29:50 | 50,02                  |
| 09/03/2007 22:30:00 | 50,01                  |
| 09/03/2007 22:30:10 | 50,02                  |
| 09/03/2007 22:30:20 | 50,02                  |
| 09/03/2007 22:30:30 | 50,02                  |
| 09/03/2007 22:30:40 | 50,01                  |
| 09/03/2007 22:30:50 | 49,99                  |
| 09/03/2007 22:31:00 | 49,99                  |
| 09/03/2007 22:31:10 | 49,99                  |
| 09/03/2007 22:31:20 | 50,00                  |
| 09/03/2007 22:31:30 | 50,00                  |

Allows display of events (voltage dips, voltage surges, cut-offs, average voltages, average frequencies) in table form. It requires a DIRIS A60 or DIRIS A40 with a memory module.

Services and Technical assistance

Our expertise extends to a complete offer of services like commissioning installation audit, training, maintenance and project engineering.

