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*Computer Integrated Documentation - PRO 5*

# ASCIIServer instruction set



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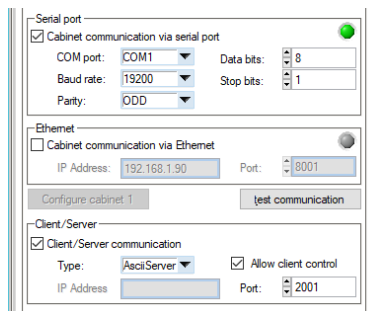
# 1 ASCIIServer - Open protocol to connect external systems with the CID-Pro software

Communication takes place via a TCP/IP interface. Commands and information are transmitted in ASCII plain text.

**CID-PRO 5** is a TCP server. It handles requests from a TCP client. The connection to the respective integrated CTS cabinet is identified via the port number.

Client and server can either run on the same computer or be connected via a local network.

The client needs the IP address of the server computer to establish a connection.



For the ASCIIServer function, **Client/Server communication** must be enabled, **ASCIIServer** selected as the type and a **port number** set.

**Allow client control** enables authorisation for “external” access.

The ASCII server is only ready for operation after the settings have been saved and the CID software has been restarted.

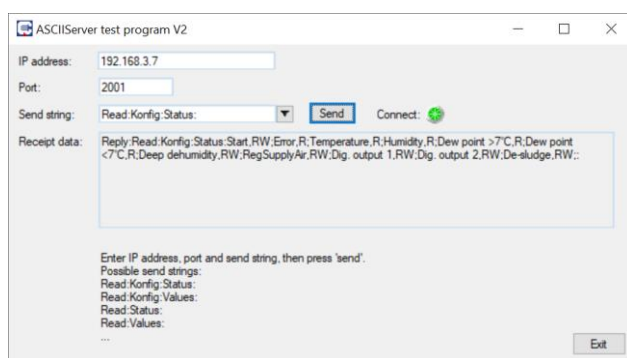


## Note

Read commands should not be issued more than once per second.

Write commands should only be issued every 5 seconds. Otherwise, the usability of the software is noticeably degraded.

For test purposes, an ASCII server test program can be downloaded and installed from our homepage:



IP address of the system on which the **CID-PRO** software runs.

Port - assignment of the CTS cabinet number, in the example port 2001 for cabinet 1.

Send string - ASCIIServer instruction set, see Chapter 2, page 3.

Receipt data - respective response from the **CID-PRO** software.



## Source of the ASCIIServer test program:

<https://www.cts-umweltsimulation.de/en/> → Downloads → Software  
→ ASCIIServer test program

## 2 ASCII Server instruction set

### 2.1 General

Individual blocks of a command or response are separated by [:]. Within the data block of a command or response, the information of different channels is separated by [;]. The fields within a channel information are separated by [,].

If the server cannot recognise the command, it sets a NAK (negative acknowledgement) from the data block that is not understood and aborts:

#### Example 1:

Client command:

Read:Konfig:StatusMeldung:

Server response:

Reply:Read:Konfig:NAK:

#### Example 2:

Client command:

Konfig:Status:

Server response:

Reply:NAK:

### 2.2 Reading the chamber configuration

#### Digital channels:

Client command:

Read:Konfig:Status:

Server response:

Reply:Read:Konfig:Status:Start,RW;Error,R;Temperature,R;Humidity,R;Dew point >7°C,R;Dew point <7°C,R; Deep dehumidity,RW;RegSupplyAir,RW;Dig. output 1,RW;Dig. output 2,RW;De-sludge,RW;:

#### Analog channels:

Client command:

Read:Konfig:Values:

Server response:

Reply:Read:Konfig:Values:Temperature,RW,-80.0 TO 180.0,°C;Humidity,RW,0.0 TO 98.0,%rH; Water storage,R,0.0 TO 15.0,l;Dew point,R,-50.0 TO 150.0,°C;:

#### Chamber configuration (from CID-Pro software version 5.02.009 onwards)

Client command:

Read:Konfig:Chamber:

Server response:

Reply:Read:Konfig:Chamber:Name=CTS\_C-70/200;Typ=C-70/200;Nr=245678;Version=V1-82;:

### 2.3 Reading the digital channels or the cabinet status

Client command:

Read:Status:

Server response:

Reply:Read:Status:Start=0;Error=1;Temperature=1;Humidity=0;Dew point >7°C=0; Dew point <7°C=1;Deep dehumidity=0;RegSupplyAir=0;Dig. output 1=0;Dig. output 2=0;De-sludge=0;:

## 2.4 Writing the digital channels or the cabinet status

The names of the digital channels can be read via the "Read:Status:" command.

Client command:

Write:Status:Start=1:

Server response:

Reply:Write:Status:Start=1:

## 2.5 Reading the analog channels

### All channels

Client command:

Read:Values:

Server response:

Reply:Read:Values:Temperature,SET=30.00,ACT=28.68;Humidity,SET=0.00,ACT=48.70;Water storage,ACT=8.17;  
Dew point,ACT=16.81;;

### Alternatively, individual channels only

The names of the analog channels can be read via the "Read:Values:" command.

Client command:

Read:Values:Temperature:

Server response:

Reply:Read:Values:Temperature,SET=30.00,ACT=28.71;;

## 2.6 Writing the analog channels

The names of the analog channels can be read via the "Read:Values:" command.

Client command:

Write:Values:Temperature,SET=30.00:

Server response:

Reply:Write:Values:Temperature,SET=30.00:

## 2.7 Reading the error text

Only useful if "Read:Status:" - Error=1. The most recent error is displayed.

Client command:

Read:Error:

Server response:

Reply:Read:Error:Humidity sensor 08-B2,10;;

## 2.8 Reading the program status

Only required if an automatic program is running in the chamber.

Client command:

Read:Progstate:

Server response:Reply:Read:Progstate:MODE=MANU;; **or**

Reply:Read:Progstate:MODE=AUTO;NAME=Programname+Path;NO=05;LINE=03;RUNTIME=60min;WAIT=0;:

Client command (from CID-Pro software version 5.03.010 onwards):

Read:Progruntime:

Server response:Reply:Read:Progruntime:MODE=MANU;; **or**Reply:Read:Progruntime:MODE=AUTO;NAME=Programname+Path;NO=05;LINE=03;PROGRUNTIME=60min;  
PROGREMAININGTIME=1031min;WAIT=0;:

## 2.9 Program start/stop

A prerequisite is that the selected program number is also available in the control system, i.e. that it has been transferred to the corresponding program location using the CID-Pro software.

Client command:

Write:Progstate:Mode=Start;No=5:

Server response:

Reply:Write:Progstate:Mode=Start;No=5;:

Client command:

Write:Progstate:Mode=Stop:

Server response:

Reply:Write:Progstate:Mode=Stop:

## 2.10 Reading TSS shock test information

It is only output for a shock test cabinet (TSS) and only from CID Pro software version 5.02.009 onwards.

Client command:

Read:TSS:

Server response:

Reply:Read:TSS:CCS=9999;CCC=0;RTU=20;RTD=20;:

where

CCS	Set Cycle Counter	
CCC	Current Cycle Counter	
RTU	Remaining Time Up	in min
RTD	Remaining Time Down	in min

## 2.11 Reading currently recorded measurement information

(from CID-Pro software version 5.03.010 onwards):

Client command:

Read:Recording:

Server response:Reply:Read:Recording:ACTIVE=0;; **or**Reply:Read:Recording:ACTIVE=1;PATH=Filename+Path;TACT=30sec;MODE=MANU;  
STARTINGTIME=09/01/2025\_11:29:56;: