

SIEMENS

***MK8000 OPC Server Interface
Specification for CZ12***

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CZ12

The CZ12, the predecessor of the CS4, is a control unit for intrusion detection. It was developed by Cerberus Maennedorf, and is part of the DMS7000 system.

The CZ12 is physically composed of a central module, which is housed inside of a cabinet and connected by a number of detection lines to local alarming devices (i.e. the wired network of intrusion detectors). The system can be operated locally on a CT12 terminal by a restricted number of authorised users. Remote operations are performed via the serial interface, using Cerban or Cerloop connections.

The intrusion system is logically organized as follows: the CZ12 Application area is divided into a maximum of 64 Sections. Each section is divided into zones. The CZ12 supports a maximum of 96 total zones. Since commands can be performed on entire groups of detectors within these groupings, the hierarchical structure Application-Sections-Zones allows for flexible control of the detector states as well as for easier location of the intrusion events.

The arm/disarm switching is defined at the Application or Section level. The arm/disarm commands are sent via local or remote manual operations, or time-based programs.

System limits: 1 Area, 64 Sections, 96 Zones.

CZ12 Application - (INNOAPMN)

The `CZ12 Application` object represents the entire CZ12 and the geographical area covered by the intrusion protection.

Multistate		Commands											
		1-Ack	2-Reset	4-Arm	8-Disarm	16-Test	32-Active	64-Quiet	128-Disc	256-Conn	512-Block	1024-Man	2048-Status
500	Alarm Unack	✓		✓	✓								✓
This is a severe and high-risk condition which indicates that a threatened user has entered the Duress password on a terminal; the event should now be acknowledged by the operator													
502	Alarm Unreset		✓	✓	✓								✓
This is a severe and high-risk condition which indicates that a threatened user has entered the Duress password on a terminal. The event should now be reset by the operator.													
510	Alarm & Fault Unack	✓		✓	✓								✓
This event is the combination of the Alarm and Fault state. The event should now be acknowledged by the operator.													
511	Alarm & Fault Ack			✓	✓								✓
This event is the combination of the Alarm and Fault state. The event has been acknowledged.													
512	Alarm & Fault Unreset		✓	✓	✓								✓
This event is the combination of the Alarm and Fault state. The event should now be reset by the operator.													
800	Prealarm Unack	✓		✓	✓								✓
This is an indication that a potentially dangerous condition occurred on the CT12 terminal, the list includes 3 cases, namely: - an authorised user (one given special permissions) logged-on to the terminal resetting his/her password because he/she has forgotten his/her valid access code; - an individual entered a wrong password code too many times on the CT12; - part of the security protection was disarmed by an authorised operator during a time lock period, i.e. a period of time when that type of exclusion (unlock) was not permitted according to the programmed time schedule. the event should now be acknowledged by the operator.													
802	Prealarm Unreset		✓	✓	✓								✓
The event should now be reset by the operator.													
810	Prealarm & Fault Unack	✓		✓	✓								✓
This event is the combination of the Prealarm and Fault state. The event should now be acknowledged by the operator.													

811	Prealarm & Fault Ack	✓	✓		✓
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This event is the combination of the Prealarm and Fault state. The event has been acknowledged.

812	Prealarm & Fault Unreset	✓	✓		✓
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This event is the combination of the Prealarm and Fault state. The event should now be reset by the operator.

1000	Quiet		✓		✓
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No abnormal conditions present.

1100	Test		✓	✓	✓
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The security system has been locally set to maintenance/revision mode for technical activities.

1300	Disarmed	✓			✓
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This condition indicates that the entire security protection has been changed to disarmed or attended/day mode.

This is typically done during daytime or whenever the area to be protected does not require the system to detect intruders so the security sections are consequently disarmed. Note however that, depending on specific configurations, some security sections may also operate in attended/day mode or in some cases only in attended/day mode.

1350	Anomaly Unreset	✓	✓		✓
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The event should now be reset by the operator.

1351	Anomaly Ack		✓		✓
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The event has been acknowledged.

1352	Anomaly Unack	✓	✓		✓
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The anomaly condition indicates at least one of the following conditions:

- Recoverable communication fault: indicating a failure in one of the two connections to a loop network (Cerloop), i.e. the condition of data lines that connect the CZ12 with its two neighbouring nodes within the Cerloop ring topology;
- Arm/disarm switching blocked: the system switching could not properly terminate because of other events pending (e.g.: alarms/faults) that must first be addressed;
- Configuration in progress: an authorised user is modifying the local CZ12 settings;
- Out of scan: part of the CZ12 objects have been set out of scan and are therefore ignored.

The event should now be acknowledged by the operator

1369	Not Aligned				
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The control unit is not aligned to the field.

1370 Alignment In Progress

The alignment phase is in progress.

1998	Fault Unreset	✓	✓	✓	✓
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The event should now be reset by the operator.

1999	Fault Ack		✓	✓	
------	-----------	--	---	---	--

The event has been acknowledged.

2000	Fault Unack	✓	✓	✓	✓
------	-------------	---	---	---	---

A faulty condition has been detected on the CZ12 or on the communication link to it; the event should now be acknowledged by the operator.

Control unit - (INNOCCUD)

The `Control unit` object presents the possible faulty conditions related to the CZ12 control unit and to the general health of the physical subsystem.

Multistate	Commands											
	1-Ack	2-Reset	4-Arm	8-Disarm	16-Test	32-Active	64-Quiet	128-Disc	256-Conn	512-Block	1024-Man	2048-Status

1000 Quiet

No abnormal condition present

1998 Fault Unreset ✓

A faulty condition has been detected in the CZ12 Control unit and has been acknowledged. The event should now be reset by the operator.

2000 Fault Unack ✓

A faulty condition has been detected in the CZ12 Control unit and should be acknowledged by the operator; the event should now be acknowledged by the operator

Detection lines - (INNODCAD)

The `Detection lines` object presents the conditions of the physical lines connecting the intrusion detectors installed.

Multistate	Commands											
	1-Ack	2-Reset	4-Arm	8-Disarm	16-Test	32-Active	64-Quiet	128-Disc	256-Conn	512-Block	1024-Man	2048-Status

900 Tamper Unack ✓

Indicates a tamper with the physical lines connecting the intrusion detectors installed over the entire protected area; the event should now be acknowledged by the operator

902 Tamper Unreset ✓

The event should now be reset by the operator.

1000 Quiet

No abnormal condition present

1300 Disarmed ✓

This condition indicates that the tamper protection lines has been changed to disarmed.

External device - (INNOPDET)

The 'External device' object represents the health of an external unit installed in the CZ12 unit.

Multistate	Commands											
	1-Ack	2-Reset	4-Arm	8-Disarm	16-Test	32-Active	64-Quiet	128-Disc	256-Conn	512-Block	1024-Man	2048-Status

1000 Quiet

No abnormal condition present

1998 Fault Unreset ✓

The event should now be reset by the operator.

2000 Fault Unack ✓

A faulty condition has been detected on the external device; the event should now be acknowledged by the operator

External horn - (INNOHOET)

The `External horn` object shows the conditions of an external siren connected to the CZ12 unit.

Multistate	Commands											
	1-Ack	2-Reset	4-Arm	8-Disarm	16-Test	32-Active	64-Quiet	128-Disc	256-Conn	512-Block	1024-Man	2048-Status

950 Active

The external horn is active.

1000 Quiet

No abnormal condition present

1300 Disarmed

The external horn has been excluded.

Panel protection - (INNOCAGE)

The `Panel Protection` object shows the conditions related to the protection against tampering with the CZ12 cabinet.

Multistate	Commands											
	1-Ack	2-Reset	4-Arm	8-Disarm	16-Test	32-Active	64-Quiet	128-Disc	256-Conn	512-Block	1024-Man	2048-Status

900 Tamper Unack ✓ ✓

The tamper condition indicates that the CZ12 cabinet has been opened; the event should now be acknowledged by the operator.

902 Tamper Unreset ✓ ✓

The event should now be reset by the operator.

1000 Quiet ✓

No abnormal condition present.

1300 Disarmed ✓

This condition indicates that the cabinet security protection has been disabled by an authorised operator.

1351 Anomaly Ack ✓

The event has been acknowledged.

1352 Anomaly Unack ✓ ✓

The cabinet protection has been disarmed by an authorised operator during a time lock period, i.e. a period of time when that type of exclusion is not permitted according to the programmed schedule; the event should now be acknowledged by the operator

Teletransmission device - (INNORDUD)

The `Teletransmission Device` object presents the condition reported by the remote transmission equipment (e.g. dialer) connected to the CZ12 control unit.

Multistate	Commands											
	1-Ack	2-Reset	4-Arm	8-Disarm	16-Test	32-Active	64-Quiet	128-Disc	256-Conn	512-Block	1024-Man	2048-Status

1000 Quiet

No abnormal condition present.

1998 Fault Unreset ✓

The event should now be reset by the operator.

2000 Fault Unack ✓

A faulty condition has been detected on the teletransmission device; the event should now be acknowledged by the operator.

Alarm transmission - (INNORDAL)

The `Alarm Transmission` object presents the status of the remote calls made after an alarm has been detected.

Multistate	Commands											
	1-Ack	2-Reset	4-Arm	8-Disarm	16-Test	32-Active	64-Quiet	128-Disc	256-Conn	512-Block	1024-Man	2048-Status

950 Active

The alarm remote call has been triggered.

1000 Quiet

No abnormal condition present.

1351 Anomaly Ack

The alarm remote call has been delayed. The event has been acknowledged.

Fault transmission - (INNORDFL)

The `Fault Transmission` object presents the status of the remote calls made after a fault has been detected.

Multistate	Commands											
	1-Ack	2-Reset	4-Arm	8-Disarm	16-Test	32-Active	64-Quiet	128-Disc	256-Conn	512-Block	1024-Man	2048-Status

950 Active

The fault remote call has been triggered.

1000 Quiet

No abnormal condition present.

1351 Anomaly Ack

The fault remote call has been delayed. The event has been acknowledged.

Digital Input - (INNOINGE)

The 'Digital Input' objects represent the 8 general-purpose input contacts available on the CZ12 control unit.

Multistate	Commands											
	1-Ack	2-Reset	4-Arm	8-Disarm	16-Test	32-Active	64-Quiet	128-Disc	256-Conn	512-Block	1024-Man	2048-Status

950 Active

The input was been activated.

1000 Quiet

No abnormal condition present.

Printer - (INNOPRET)

The 'Printer' object represents the serial printing device being used in the CZ12 control unit.

Multistate	Commands											
	1-Ack	2-Reset	4-Arm	8-Disarm	16-Test	32-Active	64-Quiet	128-Disc	256-Conn	512-Block	1024-Man	2048-Status

1000 Quiet

No abnormal condition present

1998 Fault Unreset ✓

The event should now be reset by the operator.

2000 Fault Unack ✓

A Fault condition has been detected on the serial printer; the event should now be acknowledged by the operator.

Section - (INDESEGE)

The `Section` objects are considered parts of the entire intrusion-protected area represented by the `CZ12 Application` object. Sections can be switched on (Armed) and off (<Disarmed>) individually, by specific commands, or globally, by switching the Application area on and off. A Section is made up of `Zone` objects. The connected zones inherit whatever state the Section is set to.

Multistate	Commands											
	1-Ack	2-Reset	4-Arm	8-Disarm	16-Test	32-Active	64-Quiet	128-Disc	256-Conn	512-Block	1024-Man	2048-Status

1000 Quiet ✓ ✓

No abnormal condition present.

1100 Test ✓ ✓

The section has been set into test mode to convert the classification of the alarm events concerning the associated zones from real alarm to test alarm.

1300 Disarmed ✓

The section has been disarmed; when in this condition, the associated zones will not generate alarms. However, tampers and faults can still be detected.

1351 Anomaly Ack ✓

The section has been disarmed by an authorised operator during a time lock period, i.e. a period of time when that type of exclusion is not permitted according to the programmed schedule. The event has been acknowledged.

Burglary zone - (INBUZOG)

The 'Burglary zone' object represents the actual intrusion detectors handled by CZ12. The zones are the lowest hierarchical level that is visible to the user. Unless the individual zone has been disconnected, they assume the state of their parent Section (Armed/Disarmed).

Multistate	Commands											
	1-Ack	2-Reset	4-Arm	8-Disarm	16-Test	32-Active	64-Quiet	128-Disc	256-Conn	512-Block	1024-Man	2048-Status
400 Alarm & Tamper Unack	✓					✓		✓				
This event is the combination of the Alarm and Tamper state. The event should now be acknowledged by the operator.												
402 Alarm & Tamper Unreset		✓				✓		✓				
This event is the combination of the Alarm and Tamper state. The event should now be reset by the operator.												
500 Alarm Unack	✓					✓		✓				
The intrusion detector has reported an alarm. The specific event depends on the type of detector; the event should now be acknowledged by the operator.												
502 Alarm Unreset		✓				✓		✓				
The event should now be reset by the operator.												
900 Tamper Unack	✓					✓		✓				
This condition indicates that the detector has been tampered with; the event should now be acknowledged by the operator.												
902 Tamper Unreset		✓				✓		✓				
The event should now be reset by the operator.												
950 Active							✓		✓			
This condition represents the active state of the input contact.												
1000 Quiet						✓		✓				
No abnormal condition present.												
1100 Test						✓		✓				
When in test mode, the triggered detectors report the Test alarm condition.												

1111 Test-Alarm Ack

✓

✓

This condition represent the test active state for the zone. The event has been acknowledged.

1351 Anomaly Ack

✓

✓

✓

The event has been acknowledged.

1352 Anomaly Unack

✓

✓

✓

✓

The anomaly indicates that the zone is not ready to be switched on (Armed) because the detector is currently triggered.

This condition is reported when the parent section is commanded to switch on but the zone, if set on, would immediately be set in alarm. The event should now be acknowledged by the operator

1400 Disconnected

✓

✓

The zone has been set out of service. When in this condition, the object will not generate alarms, tampers or faults.

Door monitor zone - (INBUZODM)

The `Door-monitor Zone` object represents a specific type of detection handled by CZ12 and dedicated to the supervision of a door and the door's lock. In certain configurations, the lock input can be used for other types of applications.

Unless the individual zone has been disconnected, the zones assume the state of their parent `Section` (Armed/Disarmed).

	Multistate	Commands											
		1-Ack	2-Reset	4-Arm	8-Disarm	16-Test	32-Active	64-Quiet	128-Disc	256-Conn	512-Block	1024-Man	2048-Status
400	Alarm & Tamper Unack	✓					✓		✓				
This event is the combination of the Alarm and Tamper state. The event should now be acknowledged by the operator													
401	Alarm & Tamper Ack						✓		✓				
This event is the combination of the Alarm and Tamper state. The event has been acknowledged.													
402	Alarm & Tamper Unreset		✓				✓		✓				
This event is the combination of the Alarm and Tamper state. The event should now be reset by the operator.													
500	Alarm Unack	✓					✓		✓				
The detector has reported an alarm: the door has been forced open; the event should now be acknowledged by the operator													
501	Alarm Ack						✓		✓				
The event has been acknowledged.													
502	Alarm Unreset		✓				✓		✓				
The event should now be reset by the operator.													
900	Tamper Unack	✓					✓		✓				
This condition indicates that the door detector has been tampered with; the event should now be acknowledged by the operator													
901	Tamper Ack						✓		✓				
The event has been acknowledged.													
902	Tamper Unreset		✓				✓		✓				
The event should now be reset by the operator.													

950 Active ✓ ✓ ✓

In door monitoring, this indicates that the door has been unlocked. In other applications, this condition represents the active state of the input contact.

1000 Quiet ✓ ✓

No abnormal condition present.

1100 Test ✓ ✓

When in test mode, the triggered detectors report the Test alarm condition.

1111 Test-Alarm Ack ✓ ✓

This condition shows that the test state for the zone is active. The event has been acknowledged.

1316 Manual ✓ ✓

This condition indicates that the door is unlocked.

1351 Anomaly Ack ✓ ✓ ✓

The event has been acknowledged.

User - (INNOUSGE)

The `User` objects are the logical representation of the users defined in the CZ12 unit and therefore authorised to login and use the CT12 terminal for controlling the intrusion system.

Multistate	Commands											
	1-Ack	2-Reset	4-Arm	8-Disarm	16-Test	32-Active	64-Quiet	128-Disc	256-Conn	512-Block	1024-Man	2048-Status

1000 Quiet

No abnormal condition present

1200 Armed

When these objects are <Armed>, it means that the corresponding user is enabled to login to the CT12.

Time program - (INNOTPGE)

The `Time Program` objects represent the time schedules that tell the system when to activate different levels of security during times such as normal business hours, nights, weekends and holidays.

Multistate	Commands											
	1-Ack	2-Reset	4-Arm	8-Disarm	16-Test	32-Active	64-Quiet	128-Disc	256-Conn	512-Block	1024-Man	2048-Status

950 Active

✓

✓

The time program has been activaed.

1000 Quiet

✓

No abnormal condition present.

1400 Disconnected

✓

✓

The time program has been forced.

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