# **CCM 164**

## Communications and Control Module

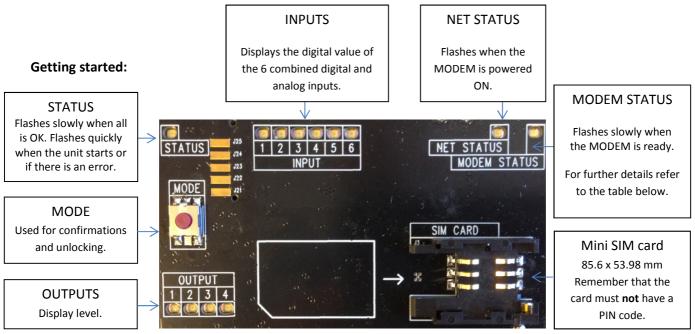


CCM 164 is a control and monitoring module with analog and digital inputs and relay outputs. All inputs and outputs can be monitored and controlled via SMS (Short Message Service) or via a smartphone app. The network is defined by the service provider's SIM card.

- An analog 4-20 mA or 0-20 mA input.
- Six digital (24 VDC) or analog (0-10 V) inputs.
- Four relay outputs two power relays and two switching relays.

The User Manual can be retrieved from <a href="www.selektro.dk/ccm">www.selektro.dk/ccm</a> under Manuals. This manual complies from firmware version 2.0.x.

Selektro A/S, Erhvervsvej 29-35, DK-9632 Møldrup



- Retrieve the User Manual from <a href="www.selektro.dk/ccm">www.selektro.dk/ccm</a> under Manuals, and read it thoroughly.
- Install a SIM card in the holder beneath the cover. Note that the SIM card must not have a PIN code.
- Turn on the power supply and wait 30 seconds until the STATUS flashes slowly.
- The module is now ready for configuration. Follow the instruction in the User Manual.

#### **Control lamps:**

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	Constantly on	on —	off	Module recently connected to the power supply and backup battery is charging.
STATUS	Slow long flashing	on	off	Module is initializing.
	Slow flashing	on	off	Module is ready and everything is OK.
	Quick flashing		off	There is an error. Refer to MODEM STATUS.
	50% on 50% flashing	on —	off	EEPROM error.
	Turned off	on	off	No supply voltage. If MODEM STATUS is flashing the module is using the backup.
T: TUS	Slow flashing	on	off	MODEM is operational.
NET	Turned off	on	off	MODEM is turned off.
	Slow long flashing	on	off	MODEM is initializing.
S	Slow short flashing	on	off	The module is using the backup. STATUS LED turned off.
ratu	Slow flashing	on	off	MODEM is ready with NET connection.
MODEM STATUS	Two quick flashes	on	off	SIM card error.
	Quick flashing		off	GSM network error.
	Turned off	on	off	MODEM is turned off.
	50% on/off flashing	on	off	Modem transmitting

### **Accessories:**

- Stub Antenna, order number: 0991-70010001
- Planar Mobile Antenna, order number: 0991-70010003

# Symbols:

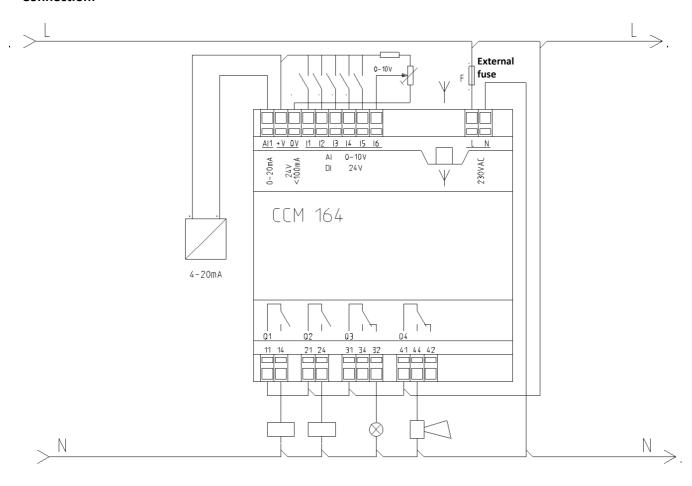


• Thoroughly read this Overview Manual and the User Manual before installing and using the product.

## **Technical specifications:**

Supply voltage	230 VAC	+10 % / -20 % / 50-60 Hz
	Use external fuse on the supply	≤250mAT
Inputs	1 x current 020 mA or 4-20 mA	±0,5 %
	6 x Digital- or voltage inputs	Low <5 V / High >12 V or 0–10 V ±1 %
Outputs	+V supply for inputs	24 VDC ±20 %, max. 100 mA
	2 x Relay output power	NO – max. 10 A AC1
	2 x Relay outputs	CO – max. 2 A AC1
Storage temperature	-40 +85°C	
Operational temperature	-20 +50°C <sup>*a</sup>	*a Not in direct sunlight
Humidity	10% - 95%	
Protection	IP20	
Weight	250 g	
Dimensions	88 x 90 mm	DIN-rail mounted, 5 module width
GSM/GPRS	Quad-band GSM	
	850/900/1800/1900 MHz	
UMTS/HSPA <sup>*a</sup>	Dual mode UMTS/GSM	
•	850/900/1800/1900/2100 MHz*b	*b Unit with 3G option
Internal backup	2 SMS messages *c @ 2 minutes	*c is NET-provider specific

# **Connection:**



# **EU – Declaration of Conformity**

Undersigned

Selektro Group A/S, Erhvervsvej 33, DK-9632 Møldrup.

hereby declare under our sole responsibility that the following equipment/product/apparatus:

Manufacturer Selektro A/S

Product CCM 164 - GSM and CCM 164 - 3G

is in accordance with the requirements of the EU directives specified below, when applied with the mentioned standards:

#### Directives:

•	2014/35/EU	Low Voltage Directive (LVD)
•	2014/53/EU	Radio Equipment Directive (RED)
•	2014/30/EU	Electromagnetic Compatibility (EMC) Directive
•	2011/65/EU + 2015/863/EU	RoHS 2 Directive

• 2012/19/EU WEEE Directive

#### Standards:

EN 60950-1:2006+A11:2009+A1:2010+A12:2011+A2:2013

		Information technology equipment – Safety
•	EN 301 489-1 V2.1.1:2017	ElectroMagnetic Compatibility (EMC) standard for radio equipment and services;
•	EN 301 489-7 V1.3.1:2005	Electromagnetic compatibility and Radio spectrum Matters (ERM): ElectroMagnetic Compatibility (EMC) standard for radio equipment and services;
	EN 301 489-24 V1.5.1:2010	Electromagnetic compatibility and Radio spectrum Matters (ERM): ElectroMagnetic Compatibility (EMC) standard for radio equipment and services;
•	EN 301 511 V12.5.1:2017	Global System for Mobile communications (GSM); Mobile Stations (MS) equipment;
	EN 301 908-1 V11.1.1:2016	IMT cellular networks;

This requires that the product is correctly mounted, maintained and used as originally intended, in accordance with the judicial laws, valid manufacturer guidelines and standard accepted procedures and use.

Applicable from 13<sup>th</sup> of June 2017.

Karl Peter Andersen
Director
Selektro A/S



Electric and electronic equipment (EEE) contains materials, components and compounds that can be dangerous and damaging to human health and to the environment. This is when waste from such electrical and electronic components (WEEE) is not correctly disposed of.

Products that are marked with the cancelled trash can are electric and electronic equipment. The cancelled trash can symbolizes that waste from the electric and electronic equipment must not be disposed of together with unsorted household garbage, but must be collected separately.

For this purpose, all local councils have established collection procedures whereby electric and electronic trash can be delivered free of charge for recycling or to sites for its disposal. Direct collection from households is also possible. Relevant details can be obtained from the respective council's technical