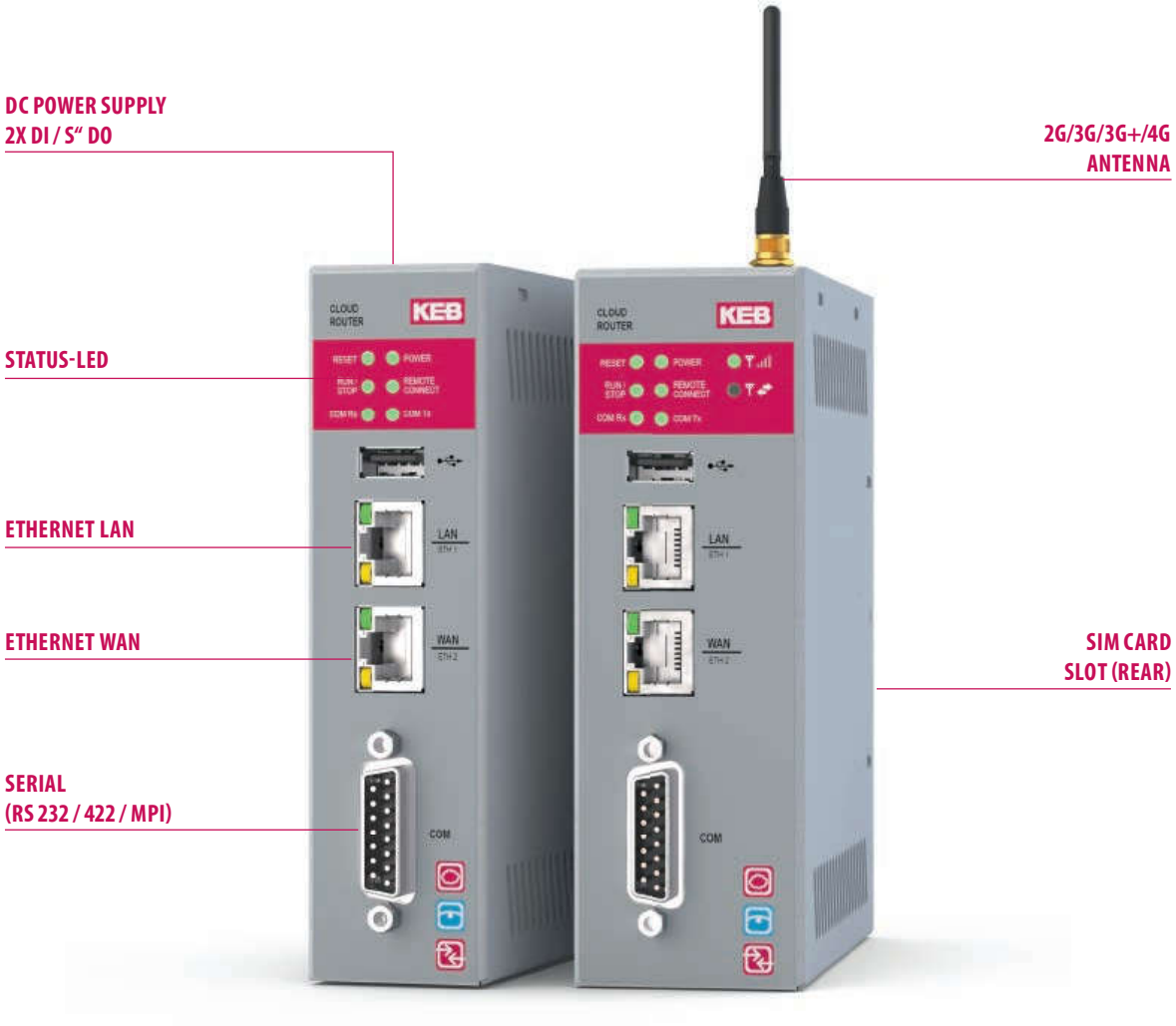
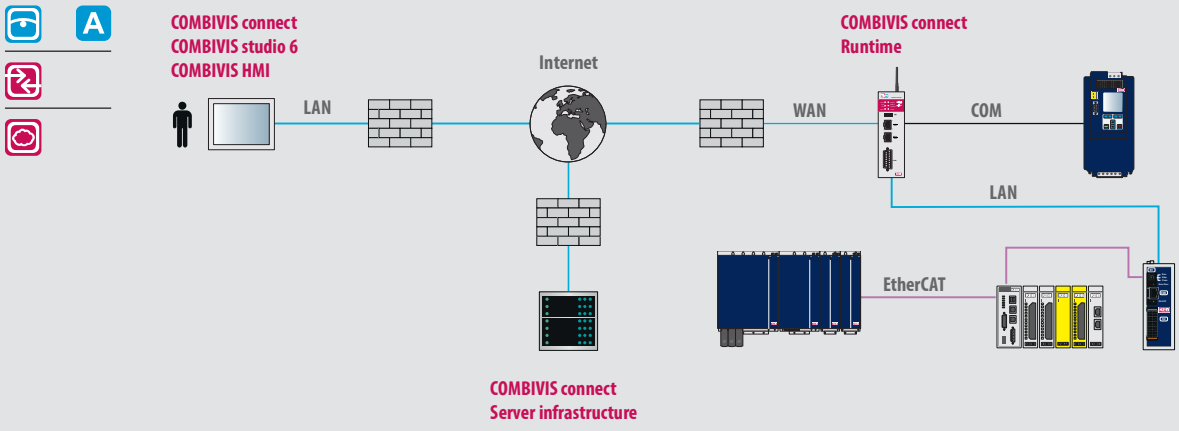
C6 ROUTER

HIGHLIGHTS

- Remote monitoring using Ethernet-based router
- Worldwide support from several server locations
- Also available as router with integrated 2G/3G/3G+ modem
- Access to remote devices via Ethernet or serial interface
- Proven COMBIVIS connect software connects the plant to be monitored to your workplace via VPN
- Additional HMI functionality for datalogging, long-term machine diagnostics and notification by E-Mail and SMS

C6 ROUTER


DC POWER SUPPLY
2X DI / S“ DO
STATUS-LED
ETHERNET LAN
ETHERNET WAN
SERIAL
(RS 232 / 422 / MPI)
2G/3G/3G+/4G
ANTENNA
SIM CARD
SLOT (REAR)
CLOUD ROUTER
KEB
LAN
WAN
COM


COMBIVIS connect
COMBIVIS studio 6
COMBIVIS HMI
LAN
Internet
WAN
COMBIVIS connect
Runtime
COM
LAN
EtherCAT
COMBIVIS connect
Server infrastructure

C6 ROUTER E / M (3G/3G+)

	C6 ROUTER E1	C6 ROUTER E2	C6 ROUTER E3	C6 ROUTER E4	C6 ROUTER M1	C6 ROUTER M2
Remote maintenance	CONNECT	CONNECT	-	CONNECT	CONNECT	CONNECT
Visuallisierung	-	HMI	HMI	HMI	-	HMI
Cloud	-	-	Cloud	Cloud	-	-
MOBILE NETWORK					**3G / 3G+**	
Type	-	-	-	-	2G/3G/3G + EDGE/HSPA Quadband Modem up to 5,76 Mbps upload / 21,6 Mbps download	
Band	-	-	-	-	UUMTS/HSPA+: B1/B2/B5; GSM/GPRS/ EDGE: 850/900/1800/1900 MHz	
Region	-	-	-	-	Europe, North- / Latin America, Asia, Africa, Oceania	
Antenna	-	-	-	-	1 x SMA plug (various additional antenna options)	
SIM	-	-	-	-	1 x SIM Card (mini) socket push-push type	

CPU		
Processor	ARM Cortex A8 processor Freescale® i.MX535 1 GHz	
MEMORY		
System memory	RAM - 1 GB	
NAND-Flash	256 MB for operating system and runtime environments (internal, not removable)	
eMMC (Solid State Disc)	2 GB project memory for free use	4 GB project memory for free use
OPERATING DATA		
Power supply	9 … 36 V DC	
Operating environment	0 … 50 °C (-20 … 70 °C Option), rel. humidity up to 95 % (without condensation)	
Lagerbedingungen	-20 … 60 °C (-20 … 70 °C Option), rel. humidity up to 95 % (without condensation)	
OPERATING DATA		
	Windows Embedded Compact 7 Pro	
APPROVALS		
	CE, cULus	
INTERFACES		
Ethernet	WAN 1 x 10/100 Mbps (RJ45)	
	LAN 1 x 100 Mbps (RJ45)	
USB on back	1 x USB 2.0	
Serial interface	1 x RS232/422/485 (DB15M) / MPI 187. kbit/s (galvanically separated)	
DIGITAL I/O'S		
Inputs	IN0 - Secured activation WAN connection. Function controlled by COMBIVIS Control Center	
	IN1 - C6 Router software reset	
Ausgänge	OUT0 C6 Router WAN connection active (output relay max. 200 mA /24 V DC)	
	OUT1 remote monitoring active (output relay max. 200 mA /24 V DC)	
PUSHBUTTON		
Buttons	C6 Router hardware reset	
	C6 Router default setting	

C6 ROUTER

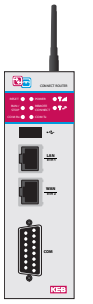
C6 ROUTER L (4G/LTE)

	C6 ROUTER L1	C6 ROUTER L2	C6 ROUTER L3	C6 ROUTER L4
Remote maintenance	CONNECT	CONNECT	-	CONNECT
Visualization	-	HMI	HMI	HMI
Cloud	-	-	Cloud	Cloud
MOBILE NETWORK	**4G/LTE**			
Type	2G/3G/4G LTE Pentaband Modem up to 50 Mbps upload/100 Mbps download			
Band	FDD-LTE: B1/B3/B7/B8/B20; TDD-LTE: B38/B40; UMTS/HSPA+: B1/B8; GSM/GPRS/EDGE: 900/1800 MHz			
Region	Europe, Latin America, Asia, Africa, Oceania			
Antenna	1 x SMAStecker (various additional antenna option)			
SIM	1 x SIM Card (mini) socket push-push type			
CPU				
Processor	ARM Cortex A8 processor Freescale® i.MX535 1 GHz			
MEMORY				
System memory	RAM - 1 GB			
NAND Flash	256 MB für Betriebssystem und Laufzeitumgebungen (intern, nicht entfernbar)			
eMMC (Solid State Disk)	4 GB Projektspeicher zur freien Nutzung			
BETRIEBSDATEN				
Power supply	9 … 36 V DC			
Operating environment	0 … 50 °C (-20 … 70 °C Option), rel. humidity up to 80 % (without condensation			
Storage conditions	-20 … 60 °C (-20 … 70 °C Option), rel. humidity up to 80 % (without condensation)			
OPERATING SYSTEM				
	Windows Embedded Compact 7 Pro			
APPROVALS				
	CE, cULus			
INTERFACES				
Ethernet	WAN 1 x 10/100 Mbps (RJ45)			
	LAN 1 x 100 Mbps (RJ45)			
USB on back	1 x USB 2.0			
Serial interface	1 x RS232/422/485 (DB15M) / MPI 187,5 kbit/s (galvanically separated)			
DIGITAL I/O'S				
Inputs	IN0 - Secured activation WAN connection. Function controlled by COMBIVIS Control Center			
	IN1 - C6 Router software reset			
Outputs	OUT0 C6 Router WAN connection active (output relay max. 200 mA /24 V DC)			
	OUT1 remote monitoring active (output relay max. 200 mA /24 V DC)			
PUSHBUTTON				
Buttons	C6 Router Hardware Reset			
	C6 Router default setting			

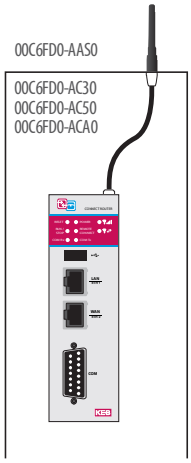
ROUTER L (4G) / K (4G-AM)

	C6 ROUTER K1	C6 ROUTER K2	C6 ROUTER K3	C6 ROUTER K4
Remote maintenance	CONNECT	CONNECT	-	CONNECT
Visualization	-	HMI	HMI	HMI
Cloud	-	-	Cloud	Cloud
MOBILE NETWORK	**4G-AM**			
Type	2G/3G/4G Pentaband Modem up to 50 Mbps upload/100 Mbps download			
Band	FDD-LTE: B2/B4/B5/B17; UMTS/HSPA+: B2/B5			
Region	North- / Latin America			
Antenna	1 x SMAStecker (various additional antenna options)			
SIM	1 x SIM Card (mini) socket push-push type			
CPU				
Processor	ARM Cortex A8 processor Freescale® i.MX535 1 GHz			
MEMORY				
System memory	RAM - 1 GB			
NAND-Flash	256 MB for operating system and runtime environments (internal, not removable)			
eMMC (Solid State Disk)	4 GB project memory for free use			
OPERATING DATA				
Power supply	9 … 36 V DC			
Operating environment	0 … 50 °C (-20 … 70 °C Option), rel. humidity up to 80 % (without condensation)			
Lagerbedingungen	-20 … 60 °C (-20 … 70 °C Option), rel. humidity up to 80 % (without condensation)			
OPERATING SYSTEM				
	Windows Embedded Compact 7 Pro			
APPROVALS				
	CE, cULus			
INTERFACES				
Ethernet	WAN 1 x 10/100 Mbps (RJ45)			
	LAN 1 x 100 Mbps (RJ45)			
USB on back	1 x USB 2.0			
Serial interface	1 x RS232/422/485 (DB15M) / MPI 187,5 kbit/s (galvanically separated)			
DIGITAL I/O'S				
Inputs	IN0 - Secured activation WAN connection. Function controlled by COMBIVIS Control Center			
	IN1 - C6 Router software reset			
Outputs	OUT0 C6 Router WAN connection active (output relay max. 200 mA /24 V DC)			
	OUT1 remote monitoring active (output relay max. 200 mA /24 V DC)			
PUSHBUTTON				
Buttons	C6 Router hardware reset			
	C6 Router default setting			

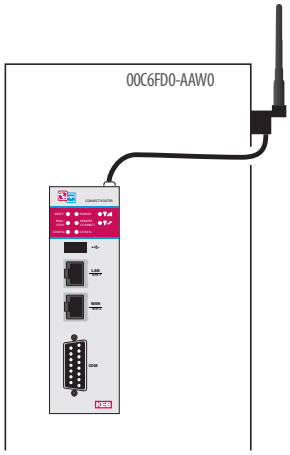
C6 ROUTER



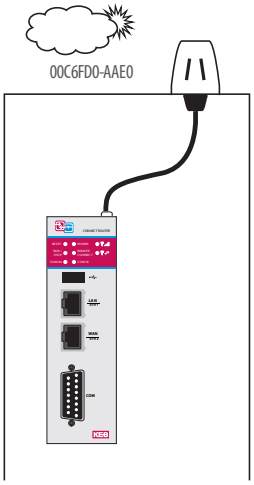
Stick antenna



Stick antenna
extension 3, 5, 10 m

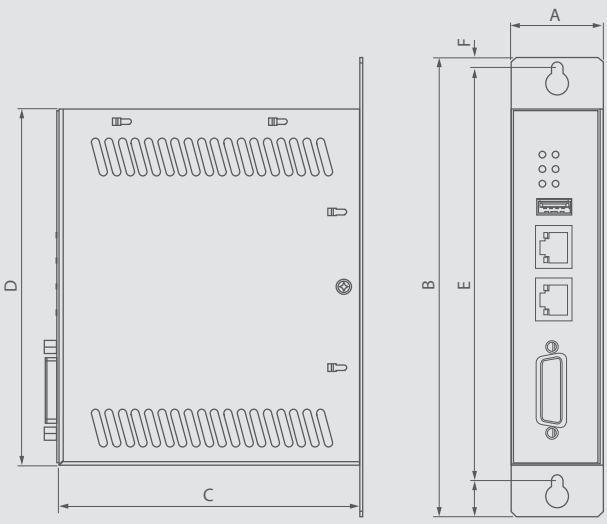


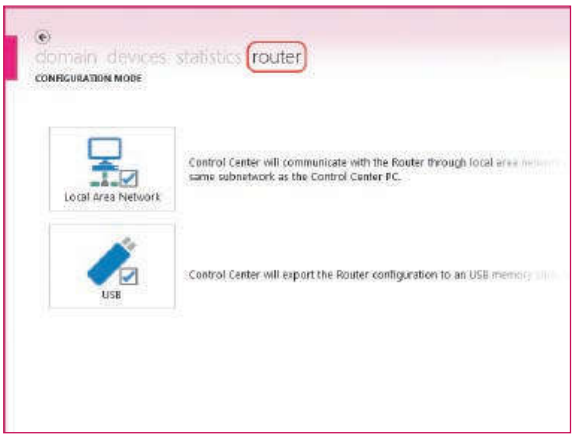
Stick antenna
Wall mounted IP67, 3 m



Outdoor antenna
IP67, 1 m

	A	B	C	D	E	F	G
C6 ROUTER EX	35	177	116	138	159	4	14
C6 ROUTER MX	45	177	116	138	159	4	14



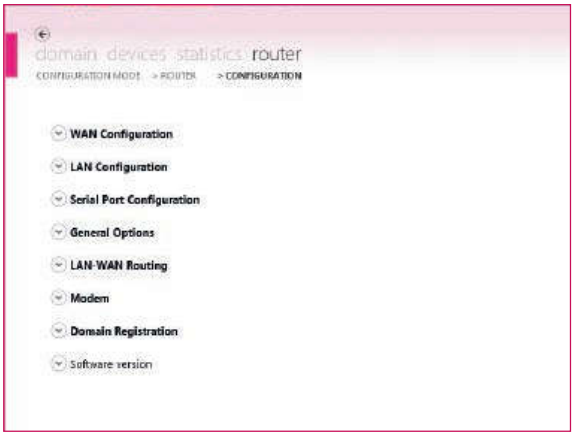


The C6 Router can be configured via two different communication paths:

- manually with local network connection
- from exported configuration data via USB memory stick

The configuration of the C6 Router is protected with necessary log-on data.

The routers available in the local network are identified via unique MAC addresses.



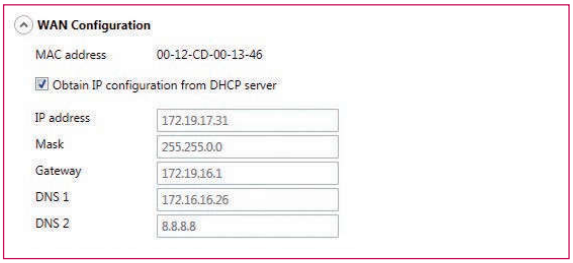
The configuration level is easy to understand, self-explanatory and limited to a minimum number of parameters.

However a number of communication paths are possible, guaranteeing a high usage density.

CONFIGURATION

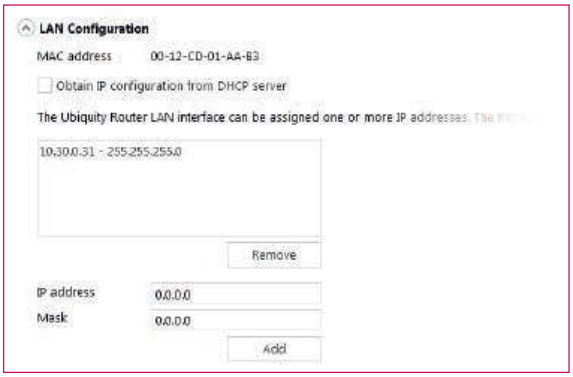
After a few minutes of router configuration, you have worldwide access to remote devices for maintenance and monitoring - irrespective of device type and manufacturer.

CONFIGURATION STEPS



Step 1

WAN-Port as Internet access (server infrastructure) – IP address can be assigned statically or automatically via DHCP.

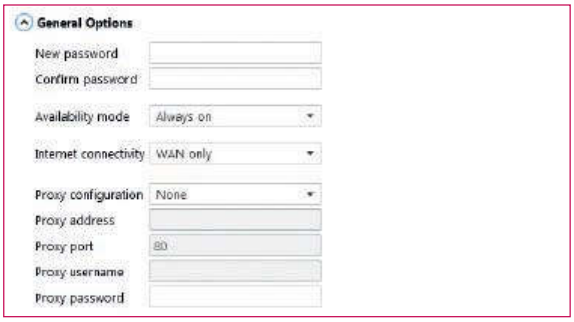


Step 2

IP configurations from one or more local automation networks accessible via VPN tunnel.

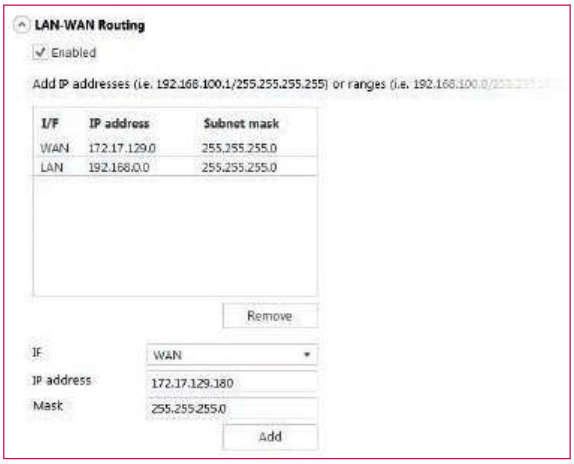
Step 3

As well as local Ethernet-linked networks, serial connections can be set up via a VPN tunnel.



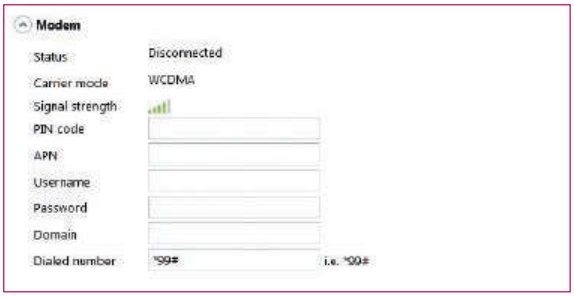
Step 4

Variable configuration with regard to connection type (WAN, Modem), handling of Internet activation (constant, via SMS and/or digital input).



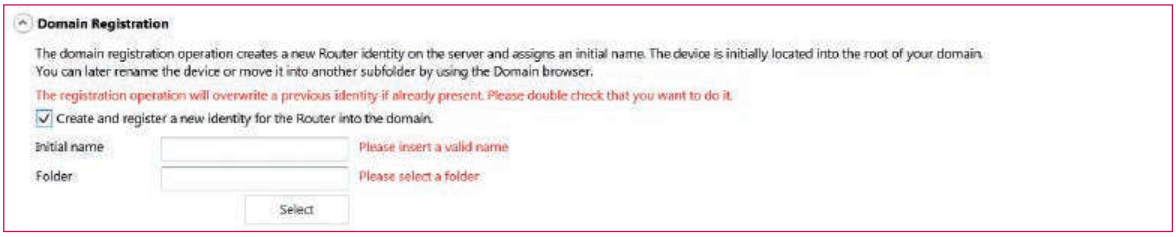
Step 5

The LAN-WAN routing allows configuration of rules between the two Ethernet interfaces of the router (LAN and WAN) which define the static routing of individual IP addresses or address ranges.



Step 6

To be able to use Internet access via modem (UMTS), the provider access data (SIM card) can be configured here.



Step 7

Domain registration opens the possibilities of remote device maintenance, and access can be managed user oriented.