

## Brabender Congrav® OP M *plus* Operator Interface for Multiple Feeder Control Systems with ISC-CM *plus*

The Brabender Congrav® OP M *plus* is a touch screen operator interface for up to 6 gravimetric Brabender feeders (loss-in-weight feeders, weigh-belt feeders, etc.) with feeder mounted ISC-CM *plus*/ISC-FC *plus* control and speed control modules.

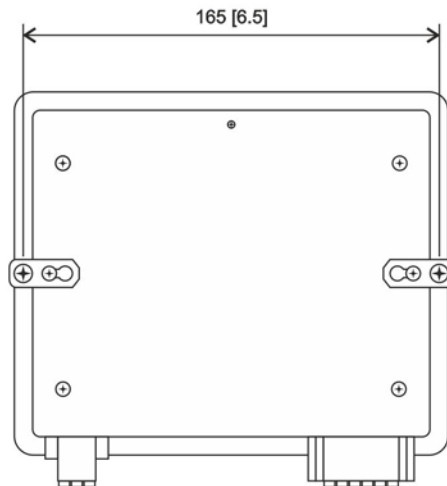
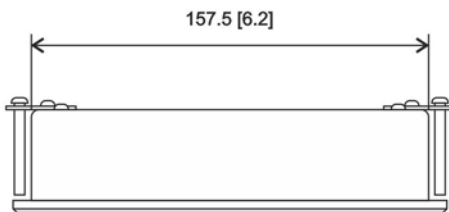
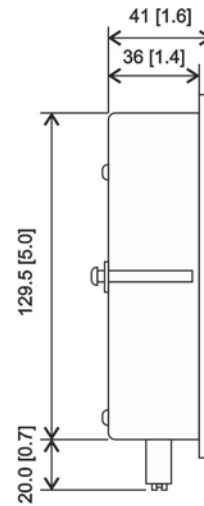
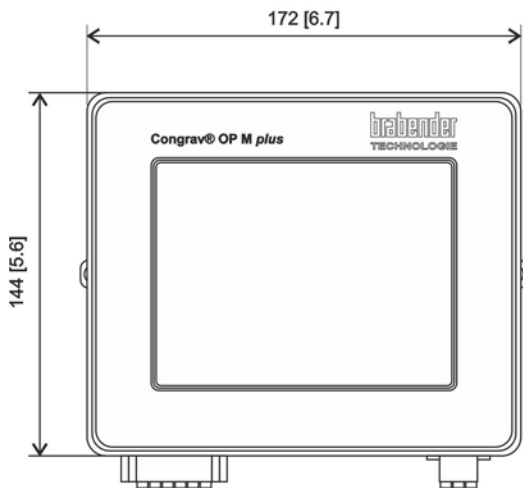
When the feeders do not communicate with host/PLC systems directly, the Congrav® OP M *plus* is either used as the operator interface within the Brabender SCC (Single Cable Connection) Field Bus System or as a local operator interface in connection with a system wide host/PLC system. To communicate with the host/PLC system, the Congrav® OP M *plus* is standardly equipped with a host interface (optionally Ethernet Modbus TCP, Profibus DP or EtherNet/IP).

The Congrav® OP M *plus* has a 5.7" high resolution color touch screen. The unit

uses a simple symbol based touch screen menu with a virtual keypad to operate the feeders. The symbols are self-explanatory making it very user friendly.

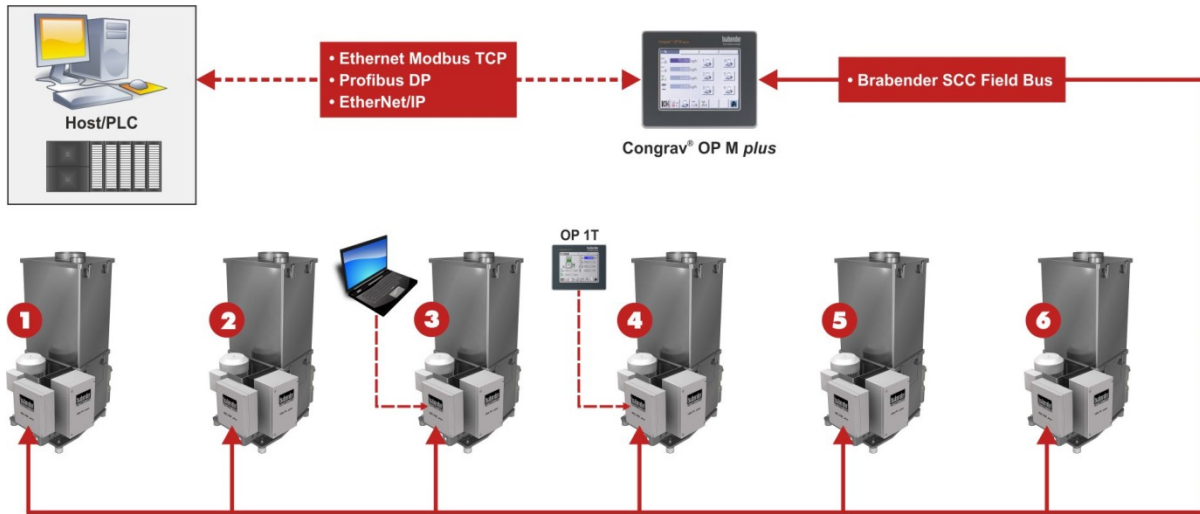
The Brabender Congrav® OP M *plus* operator interface conforms to CE directives and features high electromagnetic compatibility.

(Please refer to Brabender Works Standard "Brabender Feeder Control and Speed Control Modules ISC-CM *plus*/ISC-FC *plus* for Multiple Gravimetric Feeders" for additional information.)



Dimensions in mm (in)

## Technical Data



### Application

- Operation of up to 6 gravimetric Brabender intelligent feeders on a single cable bus (Brabender SCC) with feeder mounted ISC-CM plus/ISC-FC plus control and speed control modules (see separate Works Standards).
- Integration of volumetric feeders with variable speed motors is also possible

### Design

- Screen IP65 (≈ NEMA 4)
- Housing IP20 (≈ NEMA 1)
- 5.7" color LCD touch screen display, LED backlit
- Resolution 320 x 240 (QVGA)
- Symbol based interface with virtual keypad
- Front framing: aluminum
- Rear housing painted light grey (RAL 7035)
- Panel cutout 160 x 132 mm (6.2 x 5.1 in)
- Power supply 18-32 VDC
- Operation in environmental conditions of 0-50° C (32-122° F) and up to 85 % humidity without condensation

### Interfaces

- RS 485 interface for single cable connection of max. 6 gravimetric Brabender intelligent feeders (loss-in-weight feeders, weigh-belt feeders, etc.) with feeder mounted control modules ISC-CM plus and speed control modules ISC-FC plus
- Host/PLC interface (optionally Ethernet Modbus TCP, Profibus DP or EtherNet/IP)

### Noise Immunity

- The unit complies with the following directives and harmonized specifications of the European Union:
  - EN 61000-4-2 (ESD immunity)
  - EN 61000-4-3 (radiated RF immunity)
  - EN 61000-4-4 (burst immunity)
  - EN 61000-4-5 (surge immunity)
  - EN 61000-4-6 (conducted RF immunity)
  - CISPR 16/EN 55011 class A (interference voltage)

### Feeder Compatibility

The Congrav® OP M plus is compatible with all continuous Brabender loss-in-weight feeders, weigh-belt feeders and coriolis mass flow meters using ISC-CM plus control modules.



Modifications reserved. All data describe our products in a general manner. They are no agreement on or warranty of characteristics in the sense of § 434 or guarantee in the sense of § 443 of the German Civil Code or similar regulations and effect no liability.

Issue 5.0 (May 16)  
Supersedes 4.0 (April 16)